




radioval

A European Cancer Image Platform Linked to Biological and Health Data for Next-Generation Artificial Intelligence and Precision Medicine in Oncology

Deliverable D7.3: Plan for dissemination and exploitation incl. communication activities

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Version log

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26.02.2023	1.0	A. Emelie, O. Díaz & K. Lekadir UB	Revised and corrected final version submitted to the EC

Executive Summary

This deliverable describes the communication and dissemination strategy and activities for RadioVal during the project's duration. This plan is a living document that provides a framework for the project's communication and dissemination activities and will be revised and updated regularly. The core stakeholders and target groups for dissemination activities are outlined in this deliverable, as well as respective dissemination objectives and strategies.

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1. Introduction

This deliverable defines the overall strategy and activities undertaken during, and beyond the duration of the RadioVal project. Deliverable 7.3 is a living document that provides a framework for the project's dissemination, communication, and exploitation activities. It will be regularly reviewed and updated during the project in order to reflect the project's progress and further fine-tune the outreach activities.

The core stakeholders and target groups for the communication activities are outlined in this deliverable, as well as dissemination objectives and strategies for these groups. Moreover, this deliverable also contains the RadioVal plan for exploitation of project results during and beyond the project period.

1.1 Definitions

- **Communication**
 - **Promoting project and results:** Inform promote and communicate your activities and results.
 - Targets multiple audiences beyond the project's own community (incl. media and broader public).
 - Engage with stakeholders, raise awareness, generate demand, show success of European Collaboration.
- **Dissemination**
 - **Making results public:** Describe and publicly disclose results, transfer knowledge, make results available for others to use.
 - Targets audiences interested in the use of the results: scientific community, industry, policymakers.
 - Maximise results' impacts, allow others to continue, advance the state of the art, make results a common good.
- **Exploitation**
 - **Exploiting results:** Make concrete use of project results (commercial and non-commercial).
 - Targets all people/organisations that make concrete use of the project results, including project partners themselves.
 - Provide new solutions, new opportunities for the market, ensure valorization of research effort.

2. Objectives

The objectives of the RadioVal dissemination, communication and exploitation strategy are to:

- Inform about and promote the project's objectives and key facts including information about its partners and funding source;
- Create awareness of and understanding about the project, its scope, and expected outputs and impact;
- Maximise the impact of project activities and results by spreading them widely among appropriate stakeholder groups and across different channels;
- Engage stakeholders during the project by collecting their feedback on selected topics and outputs to facilitate uptake of the project results;
- Demonstrate how the project outputs are relevant for Europe's patients, society and economy;



- Encourage the political uptake of the project outputs and pave the way for academic exploitation in future research activities and education and training.

3. Stakeholders and target audience

To effectively communicate information about the project, we identified multiple stakeholders as part of our target audience. During the proposal preparation, an initial stakeholder mapping was performed. Following the project start, a thorough and iterative update to the stakeholder mapping was performed (this is described in D1.1 Social innovation framework) leading to an expansion and refinement of the groups to target. For coherence, WP7 will be using the stakeholder mapping developed in WP1 as the basis to define the target groups for dissemination and exploitation purposes.

The identified groups will be targeted using tailored dissemination and communication approaches specific to each cluster. This ensures a customised presentation of the project, as well as relevant uptake by the target audience and will substantially increase the project’s impact.

The target groups to whom we will disseminate results are:

- Patients & carers
- Healthcare professionals
- Hospital administration (incl. data/IT managers)
- Ethicists, regulators
- Policymakers/health authorities
- AI developers & industry
- Payors and insurers

The above stakeholder groups are further specified in the table below. Some overlap between target audiences in the stakeholder groups is expected, as healthcare professionals can also be involved in AI development or hospital administration, for instance. Similarly, patients are included in the patients and carers audience, but can also play a role in the ethics, policymaking and payor target audiences.

The table below is not an exhaustive list, and some target audiences may not be relevant for (some) dissemination and communication purposes as the project progresses. They are, however, identified below in the same terms as concluded by WP1 in D1.1.

Patients & carers	Healthcare professionals	Hospital administration (incl. data & IT managers)	Ethicists, regulators	Policymakers & health authorities	AI developers & industry	Payors
Patients	Medical oncologists	Hospital director	AI ethicists	National ministries of health	Data scientists	Patients
Family members and carers	Radiation oncologists	Chief financial officer	Legal consultants	Task forces for breast cancer guidelines	Data analysts	Government (ministries of finance and ministries of health)
Patient’s navigators	Surgical oncologists	Chief information officer	Human rights advocates	Professional/clinical societies	AI engineers	Health insurers (public and private)
Patient associations	Diagnostic radiologist	Chief medical information officer	National Medicine and Medical Devices Agencies	Parliaments	Software engineers	Hospital investments
Community support groups	Pathologists	Inpatient clinical applications manager	Data protection authorities	Lobbyists	Experts with other background (e.g., bioinformatics)	Charities and donations
	Oncology nurses	Chief of Department	Social scientists			
	Social workers	Human resources				
	Psychologists					
	Nutritionists					



	Radiographers	Hospital system administrators				
		Hospital boards				
		Innovation managers				

4. Dissemination and communication plan

4.1. Strategy

To achieve the project's dissemination objectives, each activity will use the appropriate channel to ensure the messages reach the right audience. Dissemination channels range from scientific publications on recommended methodologies and emergent issues as identified by the project to general media for information intended for the general public.

To aid the execution of the dissemination strategy and correctly plan the dissemination and communication activities, the following list of questions can guide the selection of dissemination channels and shape the nature of the information that is disseminated:

- **What should be disseminated?**
 - Overall project information and expectations
 - Project achievements, such as:
 - project events
 - completion of tasks, work packages, deliverables or and milestones
 - Project results, such as:
 - General summary of the results.
 - Detailed information on the results.
 - Methodology on how results were achieved.
 - Best practices and information of how methods can be applied elsewhere.
- **To whom do we need to disseminate this information?**
 - Relevant subset of stakeholders
 - General public
- **How does this information need to be disseminated?**
 - Via scientific publications in relevant journals
 - Via events, such as:
 - Presentations at national or international scientific meetings
 - Workshops
 - Online, live-streaming events
 - Via the project website
 - Via social media
 - Via newsletters
 - Via printed media such as:
 - Folders
 - Flyers
 - Posters
 - Via traditional media such as:
 - Press releases
 - Television
 - Printed advertisements or articles
- **When is the information disseminated?**
 - As soon as possible after completion
 - Through regular updates
- **How far does the information have to be disseminated?**
 - Local
 - National



- European
- International
- **What should the dissemination of this information achieve?**
 - Set goals for reach and impact.
 - Measure performance indicators at specified intervals or times, such as:
 - Reach (e.g., number of visitors, views, or impressions)
 - Impact and engagement numbers (e.g., links, shares, open rates downloads, 'likes')

Based on this approach for defining the dissemination and/or communication activities, the consortium can identify the unique needs of each stakeholder group, and the subsequent activities will correspond to these needs, ensuring effective and efficient distribution of project information and a maximised impact.

4.2. Dissemination and communication activities

RadioVal's dissemination activities address one or more of the identified stakeholder groups and ensure that the dissemination objectives are achieved. Stakeholders will be targeted using tailored dissemination approaches. Specific dissemination material will be produced, and activities developed in cooperation with all project partners. This ensures a customised presentation of project progress and results, as well as relevant uptake by the target audience and will substantially RadioVal's impact.

4.2.1. Dissemination and communication tools and channels

Provision of information to a wide range of target audiences is crucial to increase the project's visibility and ensure uptake of the project's outcome and that the envisaged impact is reached. To do so, several tools and channels will be exploited by the RadioVal consortium.

For example, channels provided by the European Commission will be leveraged for communication and dissemination activities. This includes:

- Research and Innovation Success Stories
- CORDIS
- The Horizon Magazine
- The Open Research Europe platform
- The Horizon Results platform

Furthermore, three tools and services provided by the European Commission have also been identified for further communication, dissemination (and exploitation):

- Horizon Results Booster
- European Standardisation Booster Service for EU Projects
- Innovation radar

In addition, online magazines, newsletters, papers, and journals, as well as social media and other online and offline tools will be used to promote the project, project partners, objectives, and results. The dissemination measures will rely on the material (both electronic and print) developed by partners and implement the overall dissemination and communication strategies as outlined in this document.

4.2.1.1. Visual identity and branding guidelines

All communication and dissemination activities will be carried out building on the visual identity of RadioVal. This includes all print and digital media, ranging from report presentation templates, the project website, and newsletter templates to folders with background information, roll-ups, and scientific posters.

A brandbook with guidelines on how to use the different elements has been developed. The project logo and visual elements are available to the entire consortium in different formats.



♀ radioval

RadioVal project logo

The project logo consists of a logotype and a wordmark.



RadioVal logomark

The logotype represents the breast cancer ribbon. It can be used in a standalone fashion, preceding the wordmark, or above the wordmark. If possible, the logotype should be used in its electric pink colour for brand recognition and colour signalling to the original pink of the breast cancer ribbon. The colour is defined as #FF52CE in HEX/RGB for digital use, and CMYK(0/76/0/0) for print use.

The wordmark spells out RadioVal in lowercase, for a modern but approachable look. The I in RadioVal is stylized without a dot. This way the IO in the wordmark also doubles as the 1 and 0 in binary computations; and can also represent the IO for the IT-related I/O abbreviation for input/output, establishing a link to the digital and AI-nature of the project. The preferred colour for the wordmark is dark blue, defined as #180054 in HEX/RGB and CMYK(100/100/24/39) for print use. Alternatively, the wordmark can also be displayed in black or white, depending on the background or use-case.

The wordmark uses the Montserrat font.

Whenever the logo, it should be surrounded with clear space to ensure its visibility and impact. No graphic elements of any kind should invade this zone. The logo and the icon's exclusion zone is equal to half the height of the icon.



Guidelines on how to use the RadioVal logotype and wordmark

Further colours have been defined for the visual identity, as well as the use of a gradient between the two colours. This is purple, defined as #AD5BFF in HEX/RGB and CMYK(44/69/0/0), and purple blue, defined as #5727F3 in HEX/RGB and CMYK(75/78/0/0).



Primary and secondary colours for RadioVal

Further visual assets include a set of stock photos, as well as a pixelated visual asset to be used as an overlay. The guidelines dictate that photos are used either in greyscale with a coloured visual asset overlay or stylized in the purple defined above.



Guideline on how to use visual assets

The visual identity is in use on the project website, located at www.radioval.eu, as well as on social media platforms (Twitter and LinkedIn). Several document templates, including for PowerPoint presentations and Word documents have also been made.

4.2.1.2 Acknowledgement and information on EU funding

On all material, electronic or printed (*conference presentations, publications, information material, media relations, social media, patent applications*), the EU funding is acknowledged.

Apart from the EU emblem, no other visual identity or logo is used to highlight the EU support.

When displayed in association with other logos (*e.g., of beneficiaries*), the emblem must be displayed at least as prominently and visibly as the other logos.

4.2.1.3. Project Website

The RadioVal project website, located at radioval.eu, offers information about the project and its results to an international audience. The set-up of the website was finalised by month 3 (D7.1 Project website).

The RadioVal website features a modern, responsive design following the aforementioned visual identity and branding guidelines. The responsive nature ensures that the website can be accessed



not only from a computer, but also works well on mobile devices such as tablets and smartphones. The design is in line with, and completes, the visual identity of the project.

The website presents the project's overall aims and objectives and gives information on each work package and how it contributes to the overall goals of the project. A news section with regular updates informs visitors about the latest project developments, its progress and related events. As appropriate, the news items will also include a comment function to promote stakeholder engagement and gather feedback on completed milestones or public deliverables.

Additionally, the project partners are presented in an overview as well as detailed profiles with links to the partners' websites for further information.

All future, non-restricted deliverables and reports, press items and other dissemination material will be made available to download on the website. A list of scientific publications will also be made available with links to open access publications or copies in repositories.

The website will evolve in course of the project and be updated on a regular basis as the project progresses.

4.2.1.4. Social Media

In addition to the project website, an online presence for RadioVal is established on social media. Currently, this includes a Twitter profile, a LinkedIn page and a YouTube channel. The partners will use social media platforms, such as [Twitter](#), [LinkedIn](#), and [YouTube](#) to raise awareness and disseminate information.

Further promotion will be done via the partners' social media accounts to maximise reach. Social media activities will, where possible, tie in with relevant European or global events such as the World Cancer Day and but certainly also in health-related events like the European Congress of Radiology (ECR).

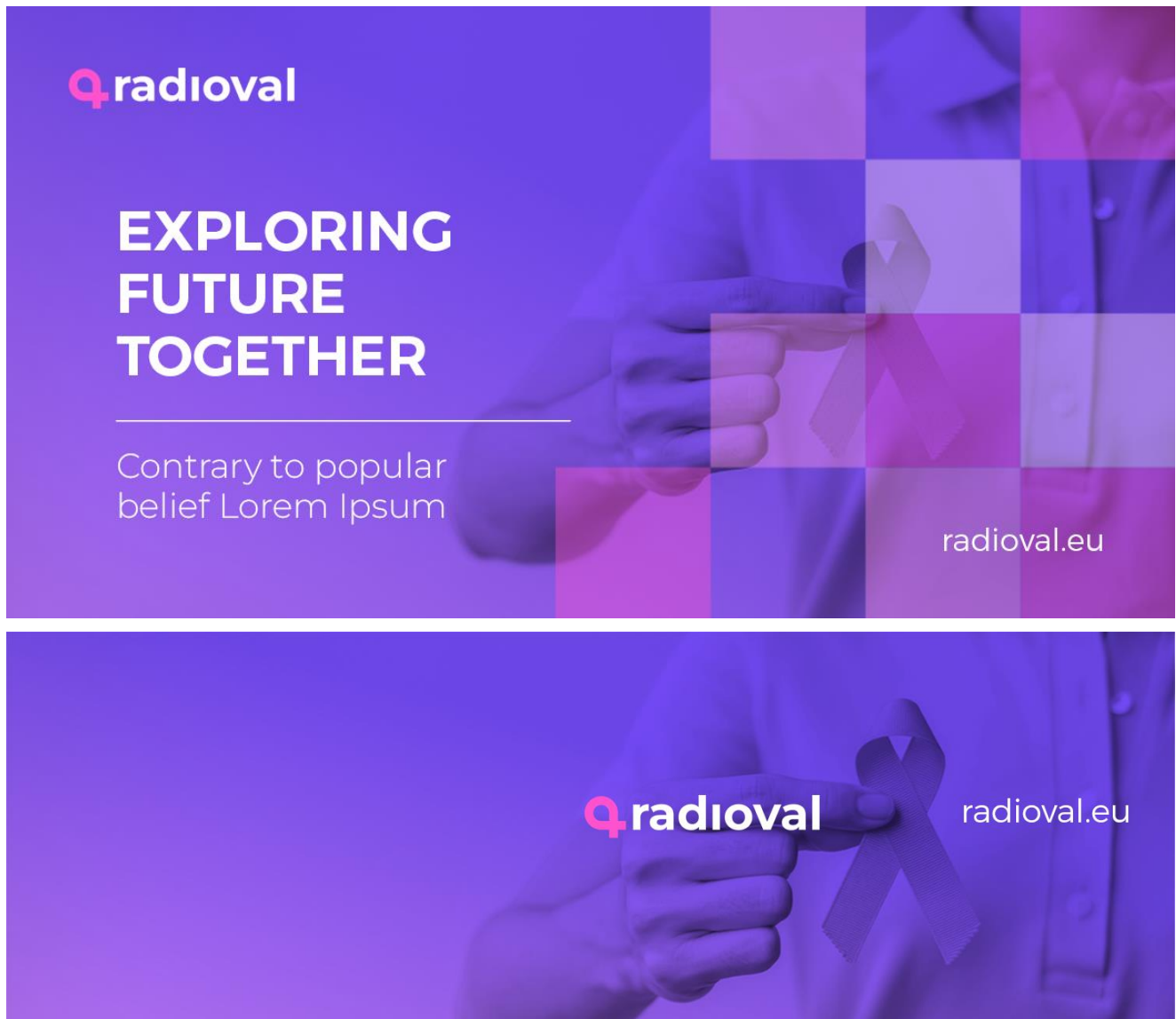


World Cancer Day tweet from the RadioVal project account



World Cancer Day tweet about RadioVal from the EIBIR account

Templates for social media posts have been prepared as well. Examples can be seen below. The open design files are available to the consortium upon request.



Social media template

4.2.1.5. Promotional Material

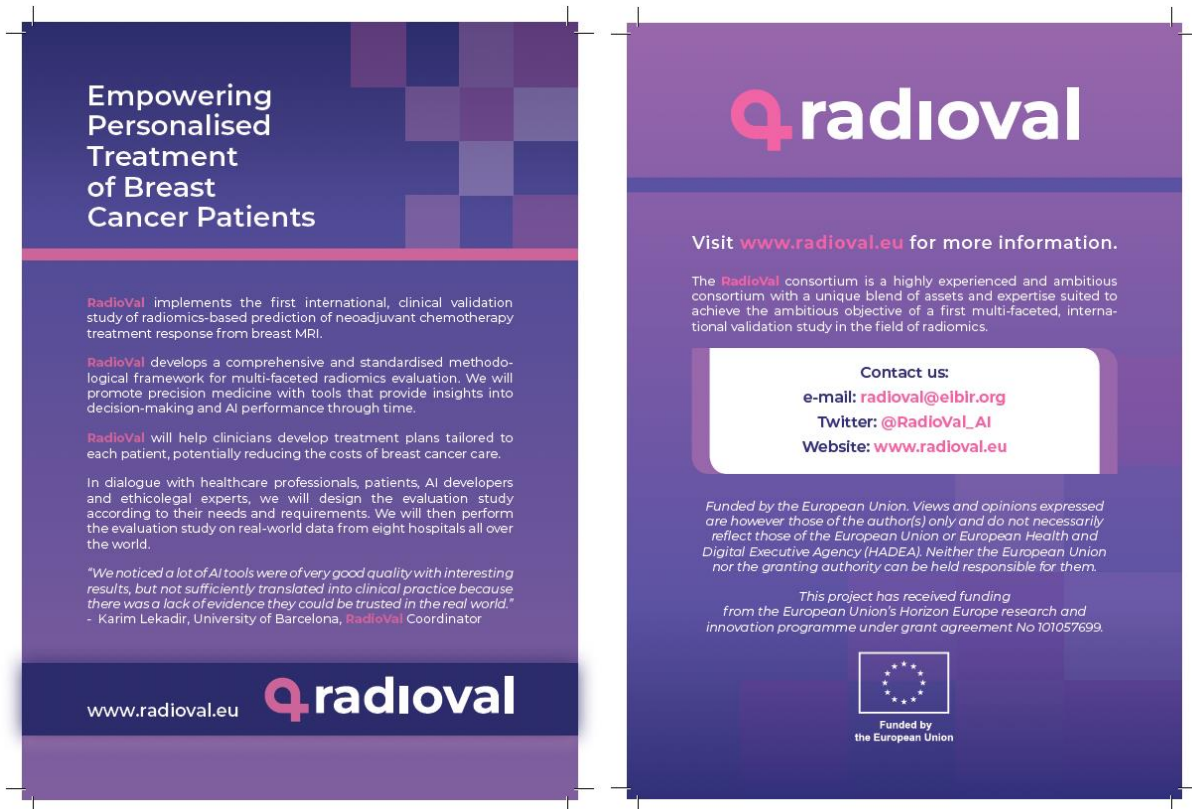
EIBIR leads the development of promotional material, with support from all project partners. Promotional material that will be developed includes a periodic digital newsletter, target-audience specific folders and flyers with relevant, general information about RadioVal, promotional posters, and a general presentation.

Partners will use institutional publications, such as annual reports, institutional newsletters, or internal and external websites, to disseminate information about RadioVal. Additionally, partners will prepare articles for publication in national newspapers, magazines, or websites.

Posters or roll-ups will be prepared for display at workshops, meetings, congresses, and conferences. These can be for promotional or informational use. Posters and roll-ups promoting RadioVal will be designed to be aesthetically pleasing and attract attention and contain only general information about the project. Informational posters will be used to summarize scientific findings and achievements. Both types of posters will be designed to fit the project's visual identity.

All promotional material will include contact details of the publishing partner, the RadioVal project manager, and a link to the project website where further information can be obtained.

For initial awareness-raising activities, a simple introductory flyer has been designed. This can be distributed at in-person events. The first major event where the flyer will be shared is the European Congress of Radiology 2023. Print files are available to the consortium.



RadioVal flyer to raise awareness

4.2.1.6. Press releases

Press releases about the RadioVal project will be issued and distributed at European and national levels. To attract media attention, press releases will tie in with important project or public events and will include information about specific project activities, milestones reached, or the publication of major deliverables. All press releases will also be available on the RadioVal website and disseminated on social media.

A first press release to announce the project has been published by the project partners through their institutional channels.



SHINE 2Europe is partner in Horizon Europe project RadioVal, to validate an artificial intelligence solution for breast cancer treatment planning

18 de Agosto, 2022 | Innovation, news

RadioVal is the first major multi-centre, multi-continental and multi-disciplinary project to clinically validate an artificial intelligence solution for the prediction of patient-specific response to neoadjuvant chemotherapy in breast cancer, in eight clinical centers across Europe, South America, North Africa and Eurasia.

RadioVal | International Clinical Validation of Radiomics Artificial Intelligence for Breast Cancer Treatment Planning is a project funded under Horizon Europe, with a consortium of 16 partners led by the University of Barcelona, and with the Portuguese participation of SHINE 2Europe, which will lead the work package on social innovation.

RadioVal will be the first major multicenter, multi-continental and multifaceted clinical validation project for the estimation of radiomic-oriented adjuvant chemotherapy in the response to breast cancer, in eight clinical centers in five EU countries (Sweden, Austria, Spain, Poland, Croatia) and three countries from other regions of the world – South America (Argentina), Africa (Egypt) and Eurasia (Turkey). One of the results of the project will be a methodological structure to evaluate the Artificial Intelligence tools that will be used in the field of radiomics, according to technical, clinical and ethical criteria.

SHINE 2Europe is a Portuguese SME that seeks to promote more inclusive communities for all citizens, through the development of pioneering research and social innovation projects, with a particular focus on ethics and multidisciplinary participation.

Carina Dantas, CEO of SHINE stated "RadioVal is a unique opportunity to involve citizens, professionals, patients and public decision-makers discussing the fears, opportunities and challenges of using Artificial Intelligence in breast cancer treatment decision-making. SHINE is proud and extremely committed to its responsibilities in this unique project."

In RadioVal, SHINE will be leading Work Package 1 – Multi-stakeholder engagement and social innovation, developing the methodology to involve citizens, professionals, patients, public authorities and other relevant actors in the evaluation and implementation of radiomics and Artificial Intelligence tools in breast cancer treatment. SHINE will also be leading the impact assessment process concerning the socio-ethical implications of this work, including the diversity of contexts, countries and populations.



The project begins on September 1, 2022 and the launch meeting will take place in Barcelona on September 15 and 16, with representatives of the RadioVal consortium.

The project is co-financed under horizon Europe under the topic HORIZON-HLT-2021-DISEASE-04 and received funding of EUR 5.8 million.

Official project information at: <https://cordis.europa.eu/project/id/101057699>

Official RadioVal Press Release



RadioVal, A new European project to clinically validate an artificial intelligence solution for breast cancer treatment planning

Posted on: 24 November 2022

RadioVal, coordinated by the University of Barcelona – Faculty of Mathematics & Computer Science is the first major multi-centre, multi-continental and multi-disciplinary project to clinically validate an artificial intelligence solution for the prediction of patient-specific response to neoadjuvant chemotherapy in breast cancer, in eight clinical centers across Europe, South America, North Africa and Eurasia.



With breast cancer becoming the most common cancer worldwide, it is paramount to improve treatment and care. New treatment protocols have shown promise in reducing mortality, such as neoadjuvant chemotherapy (NAC), but they face important challenges including variability in efficacy and important side effects for patients. RadioVal will validate an artificial intelligence (AI) solution which will support clinicians in selecting the patients that are most likely to respond to neoadjuvant chemotherapy, hence reducing unnecessary treatments and patient suffering due to side effects.

The AI solution built from radiological data, otherwise known as radiomics AI, will be validated in a variety of clinical centres across the world, including from three high-income EU countries (Sweden, Austria, Spain), two emerging EU countries (Poland, Croatia), and three countries from South America (Argentina), North Africa (Egypt) and Eurasia (Turkey). Furthermore, it will validate the AI technology for its accuracy, but also for technical robustness, clinical safety and utility, applicability in the real world, as well as ethical excellence and legal compliance.

This will be the very first international validation of a radiology AI solution in breast cancer with the aim to demonstrate that it can be trusted by clinicians, patients and other stakeholders, and hence it can be deployed and adopted by healthcare centres. The RadioVal study will be implemented through a multi-stakeholder approach, taking into account clinical and healthcare needs, as well as socio-ethical and regulatory requirements from day one to foster acceptance and adoption.

Karim Lekadir, Professor at the Faculty of Mathematics & Computer Science and RadioVal's Project Coordinator declared: "RadioVal is an unprecedented opportunity to deliver strong evidence on the clinical utility and applicability of radiology AI for breast cancer care in the real world". The project started on the 1st of September 2022 and the kick-off meeting took place in Barcelona on 15-16 September 2022, with representatives of the RadioVal consortium, which consists of the following partners:

1. University of Barcelona, Spain (Coordinators)
2. Maastricht University, Netherlands
3. Quibim S.L., Spain
4. Foundation for Research and Technology, Greece
5. Grupo Maggioli, Italy
6. SHINE 2Europe, Portugal
7. Nordic Healthcare Group, Finland
8. La Fe University Hospital Valencia, Spain
9. Karolinska Institutet, Sweden
10. Medical University of Gdansk, Poland
11. University of Zagreb School of Medicine, Croatia
12. Medical University of Vienna, Austria
13. Hacettepe University Hospital, Turkey
14. Alexander Fleming Institute, Argentina
15. Ain Shams University Hospital, Egypt
16. European Institute for Biomedical Imaging Research, Austria

The project is co-funded under the Horizon Europe Programme through the HORIZON-HLT-2021-DISEASE-04 call and received a 5.8 million€ funding.

Screenshots of RadioVal-related press releases published by SHINE and UB

4.2.1.7. Congresses, conferences, and public events

RadioVal will be represented at relevant national, European, and international congresses, conferences, and public events. Partners will attend meetings relevant to their expertise and role in the project and provide general information on the project and present (interim) results.

Examples of congresses or conferences where the results will be presented by the consortium members include:

Event	Target group	Date or frequency	Link or additional information
ECR – European Congress of Radiology	Healthcare professionals; AI developers & industry	Annual	https://www.mysr.org/congress
ECS – European Cancer Summit	Healthcare professionals; Policy-makers/health authorities	Annual	https://www.europeancancer.org/summit
IEEE Conference Biomedical & Health Informatics	Healthcare professionals; AI developers & industry	Annual	https://www.embs.org/bhi/
e-Health Annual Conference & Tradeshow	Healthcare professionals; Policy-makers/health authorities	Annual	https://www.e-healthconference.com/
European Biotech Week	Healthcare professionals; Policy-makers/health authorities; AI developers & industry; Patients & carers	Annual	https://biotechweek.org/
EUSOBI conference	Healthcare professionals; Policy-makers/health authorities	Annual	https://www.eusobi.org/congress/



EUSOMII – European Society of Medical Imaging Informatics Annual Meeting	Healthcare professionals; AI developers & industry	Annual	https://www.eusomii.org/future-events/
EUROPA DONNA Pan-European Conference	Healthcare professionals; Policy-makers/health authorities; Ethicists, regulators	Annual	https://www.europadonna.org/tag/pan-european/
Medical Image Computing and Computer-Assisted Intervention (MICCAI) International Conference	Radiologists and professionals with an interest in radiology, industry	Annual	http://www.miccai.org/
Portuguese National Congress of Radiology of the Sociedade Portuguesa de Radiologia e Medicina Nuclear	Portuguese radiologists and professionals with an interest in radiology, industry	Biannual	https://www.sprmn.pt
Sociedad Española de Radiología Médica (SERM) Congress	Spanish radiologists and professionals with an interest in radiology, industry	Annual	https://www.seram.es
RSNA: Radiological Society of North America	Health care professionals, radiologist, vendors AI developers & industry	Annual	https://www.rsna.org/
IEEE Annual Conference Engineering in Medicine and Biology Society	Healthcare professionals; AI developers & industry	Annual	https://embc.embs.org/2023/
IEEE International Workshop on Imaging Systems and Techniques (IST)	Healthcare professionals; AI developers & industry	Annual	https://ist2022.ieee-ims.org/
ESMO - European Society For Medical Oncology	Healthcare professionals; AI developers & industry	Annual	https://www.esmo.org/
SEOM – Sociedad Española de Oncología Médica	Healthcare professionals; AI developers & industry	Annual	https://seom.org/
SERAM Sociedad Española de Radiología Médica	Healthcare professionals; AI developers & industry	Biannual	https://seram.es/
SIIM – Society for Imaging Informatics in Medicine	Healthcare professionals; AI developers & industry	Annual	https://siim.org/
MICCAI - Medical Image Computing and Computer Assisted Intervention	Healthcare professionals; AI developers & industry	Annual	http://www.miccai.org/about-miccai/
International Workshop on Breast Imaging	Healthcare professionals; AI developers & industry	Biannual	https://iwbi2022.com/



SPIE Medical Imaging	Healthcare professionals; AI developers & industry	Annual	https://spie.org/conferences-and-exhibitions/medical-imaging
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RadioVal will also attend one-off events or irregularly organised events.

The consortium will focus on establishing links to policy-related events as well.

RadioVal already was represented at such events, namely the III Conference on Societal Health in Lisbon, Portugal on 23-24 November 2022 and the Horizon Europe Information Week 2023 in Lisbon, Portugal on January 16, 2023.

RadioVal is also scheduled to be presented at the European Congress of Radiology 2023.

4.2.1.8. Scientific publications and presentations

RadioVal will publish its research results in high-ranking and relevant journals. We will target the following journals for publication of results.

Journal Name	Publisher	Open Access	IF
Annals of Oncology	Oxford University Press	Hybrid	32.976
Biolaw Journal	University of Trento	OA	0.204
British Journal of Cancer	Nature Publishing Group	Hybrid	9.082
Cancer Informatics	Ivyspring	OA	0.47
Cancer Medicine	Wiley	OA	4.711
Cancer Science	Wiley	Hybrid	6.518
Clinical Cancer Research	Am. Ass. for Cancer Research	Hybrid	13.801
European Journal of Cancer	Elsevier Science Ltd	Hybrid	10.002
European Radiology	Springer	Hybrid	7.034
Frontiers in Oncology	Frontiers	OA	5.738
International Journal of Cancer	Wiley	Hybrid	7.316
International Journal of Oncology	Spandidos Publications	OA	5.884
Int. J. Radiation Oncology Biology Physics	Elsevier Science Inc.	Hybrid	8.013
Journal of Cancer	Ivyspring	OA	4.478
J. of Medical Imaging and Radiation Oncology	Wiley	Hybrid	1.667
Nature Reviews Cancer	Nature Publishing Group	Hybrid	69.800
Radiology	Radiological Society of North America	OA	29.146
Scientific Reports	Nature	OA	4.997
IEEE Transactions on Medical Imaging	IEEE Xplore	Hybrid	11.037
Medical Image Analysis	MICCAI	Hybrid	13.828
Radiographics	Radiological Society of North America	Hybrid	6.312
Radiographics Cancer Imaging	Radiological Society of North America	Hybrid	3.909
American Journal of Roentgenology	American Roentgen Ray Society	Hybrid	3.959
Journal of European Radiology	European Society of Radiology	Hybrid	5.315



Radiology: Artificial Intelligence	Radiological Society of North America	Hybrid	29.146
Cancers	MDPI	Open Access	6.575
Insights into Imaging	European Society of Radiology	Hybrid	5.036
Cancer Imaging	International Cancer Imaging Society (ICIS)	Hybrid	5.605
Journal of Magnetic Resonance Imaging	ISMRM	Hybrid	2.546
Medical Physics	American Institute of Physics	Hybrid	4.506
Physics in Medicine and Biology (PMB)	IOP	Hybrid	4.174

4.2.1.9. Suggested communication and dissemination channels

The project partners will make use of their established contacts and communication and dissemination channels to reach stakeholders. In addition, where appropriate, partners will also contact National Contact Points and relevant national government agencies or public bodies with information about the project.

The following established network contacts are available to members of the RadioVal consortium:

Channels	Description	Target group	Method
The EIBIR Member network	EIBIR's network includes more than 80 clinical, research and industry members in the field of biomedical imaging research and related fields.	Healthcare professionals; AI developers & industry	Relevant results and data will be shared online upon publication, and periodically in the EIBIR annual report and newsletters.
EIBIR Shareholders	EIBIR's 12 shareholder organisations are: CIRSE, COCIR, EANM, EFOMP, EORTC, ESMI, ESMRMB, ESPR, ESTRO, EuSoMII, EFRS, ESR	Healthcare professionals; AI developers & industry	Relevant results and data will be shared online upon publication, and periodically in the EIBIR annual report and newsletters.
Europa Donna	EUROPA DONNA is a Europe-wide Coalition that facilitates the exchange and spread of pertinent information concerning breast cancer. There are currently 47 country members in the Coalition. Membership comprises patients, health professionals, breast cancer-related organisations and institutions, and women.	General Public	We will contact Europa Donna to invite them to participate to our social innovation sessions. Relevant results and outputs may also be shared online, in workshops and/or by e-mail.
European Cancer Patient Coalition (ECPC)	The ECPC has over 450 members and is the largest European cancer patients' association. Covering all 27 European Union Member States, and many other European and non-European countries, they represent those affected by all types of cancers, from the rarest to the most common.	Patients General Public	We will reach out to ECPC to invite them to participate to our social innovation sessions. Relevant results and outputs may also be shared online, in workshops and/or by e-mail.



<p>European Society of Breast Imaging (EUSOBI)</p>	<p>EUSOBI is dedicated to support research and education of the best actual screening, diagnostic and interventional practice within the European breast radiology community and beyond, as well as to publicise these methods to patients. EUSOBI has 1,113 members, including radiologists and professionals, who have an interest in any aspect of breast imaging.</p>	<p>Medical scientists, researchers and clinicians, Medical industry</p>	<p>RadioVal's results may be presented in congresses, workshops and meetings as applicable depending on the topic/scope.</p>
<p>European Society of Radiology (ESR)</p>	<p>The ESR has more than 69,300 members from 157 countries active in the field of radiology as clinicians and researchers.</p> <p>The ECR is the annual meeting of the ESR. On average more than 20,000 visitors from industry and the clinical and academic community attend the congress.</p>	<p>Healthcare professionals; AI developers & industry</p>	<p>Relevant results and data will be shared online in periodic newsletters.</p> <p>RADIOVAL findings will be presented at the ECR in dedicated sessions and/or at a dedicated booth</p>
<p>Federación Española de Cáncer de Mama (FECMA)</p>	<p>FECMA collaborates with institutions, research laboratories, etc that have for objective Breast Cancer.</p>	<p>Patients</p> <p>General Public</p>	<p>We will contact FECMA to invite them to participate to our social innovation sessions.</p> <p>Relevant results and outputs may also be shared online, in workshops and/or by e-mail.</p>
<p>Medical Image Computing and Computer-Assisted Intervention (MICCAI)</p>	<p>The MICCAI Society strives to be a leading international forum for medical image computing, computer-assisted intervention, and medical robotics. The multidisciplinary nature of these research fields brings together clinicians, bioscientists, computer scientists, engineers, physicists, and other researchers who are contributing to, and need to keep abreast of, advances in the methodology and applications of these fields.</p>	<p>Medical industry</p> <p>ICT scientists, researchers and technologists, engineers</p> <p>Medical scientists, researchers and clinicians</p>	<p>RadioVal's results may be presented in congresses, workshops and meetings as applicable depending on the topic/scope.</p>
<p>NET4Age-Friendly and SHAFÉ</p>	<p>The SHAFÉ network powered by the NET4Age-Friendly COST Action includes over 550 members of 51 countries to promote</p>	<p>Quadruple-helix of stakeholders</p>	<p>Relevant results and data will be shared with members, and synergies between stakeholders promoted.</p>



	inclusive communities in a digital world.		
Portuguese Cancer Hub	The Portuguese National Cancer Hub gathers hundreds of Portuguese organisations and experts, with the main objective of supporting the implementation of the Europe's Beating Cancer Plan (EBCP) and the Cancer Mission.	Healthcare professionals, industry, public authorities, research, civil society	Relevant results and data will be shared and synergies between stakeholders promoted.
Sociedad Nacional Española de Radiología (SERAM)	SERAM is a medical-scientific and professional organization dedicated to promote among its members the teaching, development, defense and research of all diagnostic and therapeutic aspects related to medical imaging, making its activities known to the general public.	Healthcare professionals; AI developers & industry	Relevant data to be shared with the organization
Sociedad Valenciana de Radiología (SVR)	The Valencian Society of Radiology	Healthcare professionals; AI developers & industry	Relevant data to be shared with the organization
The Artificial Intelligence for Health Imaging (AI4HI) Network	The AI4HI working group is formulated by five EU projects on Artificial Intelligence for Medical Imaging, the EuCanImage, INCISIVE, ProCancer-I, CHAIMELEON, and PRIMAGE that have received funding from the European Union's Horizon 2020 research and innovation programme, under the topic <u>DT-TDS-05-2020 - AI for Health Imaging</u>	AI developers & industry, Researchers, AI scientists, Data scientists, Medical scientist	Share common strategies and methodologies to construct validated AI tools using medical imaging and combining with relevant data to estimate clinical events in daily oncologic practice.
Network/Audience of MAGGIOLI NOW	Sharing updates and information through the Maggioli network	Maggioli's network of professionals in related sectors including AI developers & industry	Relevant news, updates, announcements and public results can be shared online upon publication, and periodically in the Maggioli annual report and newsletters.
INCISIVE Network	INCISIVE network of partners including 27 partners from 9 countries, covering expertise in complex ICT systems, Artificial Intelligence and data analytics, medical image processing, cancer clinical research and practice, data security, legal expertise, standardization and business planning	INCISIVE participants and external members of the network incl. Healthcare professionals; AI developers & industry	Relevant public results, announcements and news can be shared with the network partners, also through the website and social media, upon publication.
El Pais - Medicine	Independent daily newspaper belonging to the PRISA group, with	Patients & carers	Relevant information about imaging and breast cancer will be shared disseminated



	<p>1,004,000 daily readers in its print edition and 18,941,000 daily readers in its digital edition (according to Comscore data in 2020). It is written in Spanish, English and Portuguese.</p> <p>The news referring to breast cancer and imaging will be disseminated in the specific edition of Medicine.</p>		<p>to the society for its knowledge</p>
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4.2.2. Identified stakeholders and proposed dissemination tools and methods

Tailoring of dissemination and communication activities to the needs of individual stakeholder groups is crucial to achieve and maximise the impact of the project. The table below provides an overview of why and how we intend to reach the identified stakeholder groups:

Target group	Details	Communication and dissemination methods
Patients & carers	<p>patients; family members and carers; patient's navigators; patient associations; community support groups</p>	<ul style="list-style-type: none"> - Organise social innovations sessions/ focus groups with breast cancer patients and carers. - Create information material, such as leaflets, presentations, books, and webinars, translated into local language. - Attend patient-focused conferences such as EUROPA DONNA's Conference to share results and collect feedback. - Disseminate relevant information about the project in newspapers to favor its social diffusion.
Healthcare professionals	<p>medical-, radiation-, surgical-, diagnostic oncologists; pathologists; oncology nurses; social workers;; psychologists; nutritionists; radiographers</p>	<ul style="list-style-type: none"> -Organise focus groups with breast cancer specialists in the field (radiology, oncology). - Publications in professional journals. - Presentations at events, e.g. European Cancer Summit. - Organise workshops to demonstrate the AI solutions and seek feedback.
Hospital administration (incl. data/IT managers)	<p>Hospital director; Chief financial officer; Chief information officer; Chief medical information officer; Inpatient clinical applications manager; Chief of Department; Human resources; Hospital system administrators; Hospital boards; Innovation managers</p>	<ul style="list-style-type: none"> - Online webinars to show solutions and applications, technical features, and seek end users' feedback.
Ethicists, regulators	<p>AI ethicists; Legal consultants; Human rights advocates; National Medicine and Medical Devices Agencies; Data protection authorities; Social scientists</p>	<ul style="list-style-type: none"> - Involve ethicists and regulators in the requirements definition process (social innovation sessions)



Policymakers/health authorities	National ministries of health; Task forces for breast cancer guidelines; Professional/ clinical societies; Parliaments; Lobbyists	<ul style="list-style-type: none"> - Online webinars to show solutions and applications, technical features, and seek user's feedback. - Attend biotech exhibitions and other conferences. - Approach existing innovation hubs. Publish two white papers. - Invite policy makers and advocacy groups to workshops. - Share results with regional agencies to illustrate the potential of radiomics models in clinical use.
AI developers & industry	Data scientists; Data analysts; AI engineers; Software engineers; Experts with other background (e.g., bioinformatics)	<ul style="list-style-type: none"> - Open-access research platform with tools, results and publications - Open-access publications in peer reviewed scientific journals - Presentations at scientific conferences - Interactions with other EU projects from the same call or from related topics - Open-access research platform with tools, publications, and results. - Open-access publications in peer reviewed scientific journals - Presentations at AI developer conferences
Payors	Patients; Government (ministries of finance and ministries of health) ; Health insurers (public and private) ; Hospital investments; Charities and donations	<ul style="list-style-type: none"> - Create information material, such as leaflets, presentations, books, and webinars. - Attend patient focused conferences such as EUROPA DONNA's Conference to share results and collect feedback.

4.3 Planned dissemination activities

4.3.1 Planned events

EIBIR will organise two project-dedicated events in the last project year, one at the EUSOBI conference and one during the European Congress of Radiology (ECR) to share findings and boost awareness in the field. UB will organise an AI focused event at M42 at EUSOMI.

4.3.2 Planned press releases

EIBIR will coordinate yearly press releases with status updates.

A first press release was already coordinated and published by UB as the Coordinator.

4.3.3 Planned promotional videos

EIBIR will develop two promotional videos (M6 and M45), providing details and context about the project, and in case of the second video, also providing an overview of the results achieved.

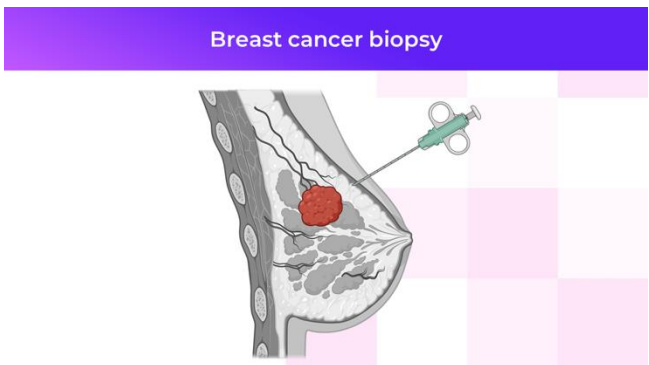
Additionally, the project is also preparing videos to be part of the RadioPack, which also provide details and context for different stakeholders. These videos are created in a collaborate effort between partners with to goal to inform a lay audience (primarily patients). Four introductory RadioPack videos have been produced and published. These videos feature English-language narration from actual researchers working on the project, with additional language being provided by subtitles as they become available. These videos are published [on a separate section on the project website](#), and [on the project's YouTube channel](#):



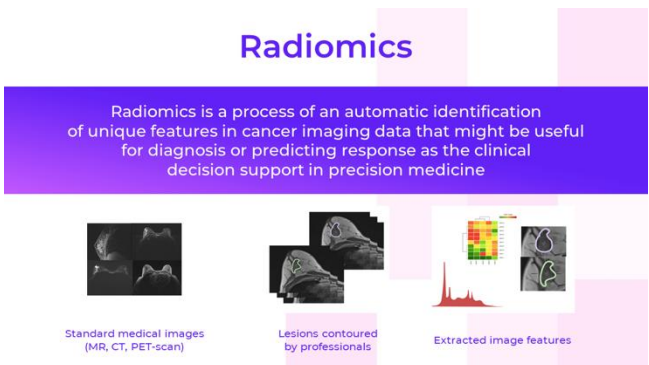
Screenshots of the RadioPack "What is RadioVal?"



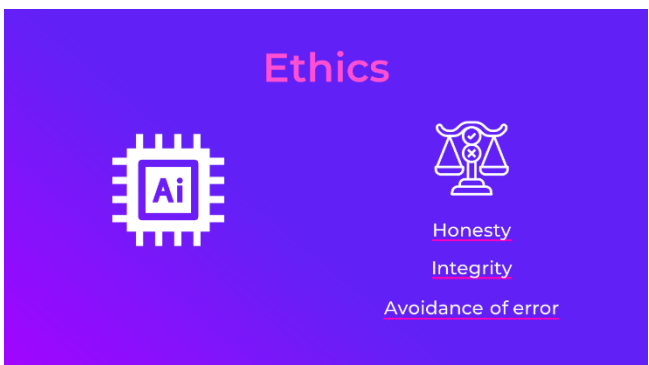
Screenshots of the RadioPack "Breast Cancer Oncology"



Screenshots of the RadioPack "Radiomics Artificial Intelligence for Breast Cancer Treatment Planning"



Screenshots of the RadioPack "Ethics Considerations in Artificial Intelligence"





4.4 Networking and synergies with other activities

The consortium will identify relevant external initiatives and establish connections, such as with projects of the same call on the clinical validation of AI solutions, as well as in the fields of radiomics and breast cancer.

The project will propose to establish cross-project Working Groups, e.g., on validation frameworks and standards. This includes the [FUTURE-AI initiative](#) for developing and establishing guidelines for trustworthy AI development.

The consortium will propose a number of joint events to align and enhance already planned efforts and to set-up common strategies for reaching both scientific communities and the general public.

Common position/white papers will be planned from M6 onwards on specific topics of common interest.

This has already led to first discussions on establishing a collaboration between RadioVal and the ODELIA project, which is developing new Swarm Learning technology for the development, deployment and validation of AI tools in breast cancer.

Many of the consortium members are also part of the EUCAIM project, setting up a pan-European infrastructure for cancer images for AI development. EUCAIM is the flagship activity of the European Cancer Imaging Initiative, which is part of the Europe’s Beating Cancer Plan.

4.5. Monitoring and evaluation of activities

To evaluate the activities carried out, the following key performance measures have been defined:

Activity/Tool	Performance measure
Website	<ul style="list-style-type: none"> • Unique visitors • Pages per visit
Social Media	<ul style="list-style-type: none"> • Impressions • Engagements (likes, comments, shares)
Printed material	<ul style="list-style-type: none"> • No of event attendees • No of copies distributed • Reach per item
Newsletter	<ul style="list-style-type: none"> • No of contacts • Open rate • Engagement rate (clicks)
Press release	<ul style="list-style-type: none"> • No of contacts • No of views • No of take ups
Presentations	<ul style="list-style-type: none"> • No of presentations • No of attendees
Publications	<ul style="list-style-type: none"> • No of publications • No of citations

5. Exploitation Plan

The main goal of RadioVal exploitation activities is to further advance research in the field of radiomic artificial intelligence in breast cancer, and to develop new validation procedures and new treatment response predictive models, that may be marketable.

To guarantee the transfer of project results beyond the funding period and to ensure that project results impact the European research landscape in the field of medical radiation protection, the RadioVal consortium will continually review and, as necessary update the initial exploitation strategy defined during the first months of the project.

Exploitation planning will be leveraged by providing dissemination activities to the relevant academic, industrial, and political stakeholders within the community to ensure adequate outreach, an essential prerequisite for successful exploitation and sustainability of the project results.



5.1 Knowledge management

Knowledge generated during the project will be published in high-quality, peer-reviewed journals and presented at relevant conferences, if possible. For this, we are following the EC guidelines for Open Access to scientific publications in Horizon Europe and compliant with OpenAIRE. In some cases, protection of intellectual property may be required. This knowledge will only be shared after appropriate protection is in place.

Intellectual Property Rights (IPR) will be managed according to the IPR Management plan included in the Consortium Agreement. In general, the results of the project will belong to the participants generating them, but where several partners have jointly carried out the work generating results and where their respective share of the work cannot be determined, they will have joint ownership of the result.

To protect both existing and forthcoming scientific results, patent applications to the European Patent Office (EPO) will be filed, while maintaining knowledge sharing and cross-fertilisation with other parallel research initiatives. During the project, consortium partners grant access rights to their results to the other partners to carry out their work on the project and/or to exploit their results.

More details will be included in Deliverable D6.3 Exploitation, regulatory and IPR planning due in M48.

5.2 Exploitation measures

Several exploitation measures are planned for the project. This includes a thorough market analysis, including a review of existing imaging AI solutions (commercial and non-commercial) in cancer care and adjacent medical areas.

In M36-M42, technological and market conditions will be evaluated across global regions (Europe, North America, Asia) using public and subscription-based sources (e.g. MedTech Europe, HIMMS Analytics).

The consortium partners will meet around M45 to discuss exploitation routes and sustainability beyond the project.

A detailed exploitation plan will be established around this consortium meeting on exploitation decisions. This plan will include go-to-market strategies and follow-up initiatives, such as integration into third-party systems and future interventional trials.

A milestone for this is due in M48 (Exploitation plan, including roadmap for regulatory approval, is written).

5.3. RadioVal results

RadioVal will generate significant knowledge across all WPs, some central milestones and deliverables can be defined as the project's major results:

- RadioVal will refer to the name of the project as well as to the radiomics evaluation study (including the evaluation framework and the generated results).
- RadioNac will refer to our existing radiomics-driven estimation of NAC response based on the preclinical results obtained by consortium members FORTH, UB and HULAFE (Figure 2). The radiomics model will be re-calibrated based on the AI4HI multi-centre data from 11 countries (n=4,450), extended to estimate NAC side effects, and tested in 8 countries based on additional n=2,700 cases.
- RadioTrack will refer to the novel traceability toolbox that will be introduced in this project to allow continuous evaluation and monitoring of radiomics tools over time and in day-to-day clinical practice beyond the duration of the clinical evaluation study.
- RadioPack will refer to a comprehensive information and communication package that will be developed to increase awareness, literacy and inclusion in the field of radiomics in general, and in radiomics-driven NAC assessment for breast cancer in particular.
- Automated segmentation tool



- General recommendations for validation of Trustworthy AI tools based on the FUTURE-AI guidelines.

5.4. RadioVal exploitation strategy

The project will enable exploitation of specific outputs and technologies (new validation procedures, new, treatment response predictive models), as well as mainstream adoption of the RadioVal radiomics models as a reference resource in investigating new AI solutions for breast cancer care.

The aim is to build bridges between research centres, healthcare institutions, public agencies and the industry for the creation of a market sustaining healthcare innovation in the emerging field of radiomics in cancer care, thus creating added value for the European economy.

5.4.1 Methodology for business planning and IPR management

The innovation and business plan will be initiated in M12, in order to have enough time to incorporate input from partners and feedback from external stakeholders.

A cost-benefit analysis will be performed, and a multi-stakeholder perspective adopted (i.e. costs and benefits will be analysed separately for different actors) to correct for optimism bias in cost and benefit estimates.

This exploitation strategy will make it possible to understand different users' expectations and main obstacles (e.g. lack of scientific evidence for clinical applications; lack of standards for radiomics validation; costs of radiomics focused clinical trials).

For linking to industries, the consortium relies on the experience of its private sector partners, QUIBIM, NHG, and SHINE, all highly active in pursuing innovation in data-driven solutions.

Two of RadioVal's innovation workshops (organised at M24 and M36) will include sessions for joint academia-SME discussions on exploitation and business planning.

Overall, potential economic impact will be quantified for the private sectors, but also for the clinical centres and target European healthcare systems.

The following table provides a summary of the project's exploitation strategy including expected exploitable results, exploitation avenues, knowledge management procedures, access rights, and the partner responsible for their exploitation.

Expected exploitable results	Exploitation / commercialisation method	Measures taken for successful exploitation
RadioVal radiomics models	Open-source radiomics models including complete documentation will be distributed via Github with links to RadioVal web portal.	Scientific results are published in open-access journals, and include reference to the RadioVal web portal. Radiomics models will be presented at conferences accompanied by social media posts to maximise exposure.
Radiomics validation guidelines	Open-access publication of well-defined criteria, metrics and processes for radiomics validation. Guidelines will be published in high-impact journals.	Applying our validation guidelines in future research projects with reference to RadioVal.
Breast treatment response prediction tool	Software and containerised applications for treatment response prediction incl. complete documentation distributed via Github/Zenodo with links to RadioVal web portal.	Involve EU industry in the development and validation during the project to ensure their uptake after the end of the project. Contact companies and entrepreneurs to discuss potential commercial use.
Clinical decision support system	Software and containerised applications for clinical decision support including complete documentation will be distributed	Involve EU industry in the development and validation during the project to ensure their uptake after the end of the project.



	via Github/Zenodo with links to RadioVal web portal.	Contact companies and entrepreneurs to discuss potential commercial use.
Tools for radiomics traceability	Open-access tools available on the RadioVal web portal. Licensing for external commercial parties.	Showcase the added value and novelty of the traceability and monitoring tools.
Clinical guidelines	Open-access white papers and informative reports <i>e.g.</i> best practices for diagnosis and treatment response prediction.	White papers and other reports are published and widely disseminated to public health authorities.
Tool for cost-benefit analysis	Open-access tools to show the cost-benefit of clinical application of radiomics models. Presentation of the tools at conferences, demos, webinars and workshops.	Partnership with academic and commercial organisations to exploit new Research and Innovation Actions (RIA) of project results.

The Project Coordinator, together with the Work Package Leaders, monitor the project implementation and, if applicable, will identify further exploitation opportunities as the project progresses.

6. Conclusion

In this document, RadioVal's communication and dissemination strategy and activities have been described and the consortium's intentions regarding the exploitation of the expected results have been presented. The communication, dissemination and exploitation plan will be reviewed at regular intervals.

The dissemination and communication activities will gradually evolve to contain more in-depth information as the project progresses, and tangible results become available. Using the strategy described in this document, the consortium is position to effectively disseminate and communicate its research output to maximise the impact. Activities as well as any updates of the communication, dissemination and exploitation plan will be reported in the periodic reports.