

DELIVERABLE

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Revision History

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Abstract (for dissemination)	This report outlines communication and publication methods agreed upon by the consortium for the length of the project lifetime, as required in project Task 7.4 'Communication and outreach strategy'. The report is divided into two sections, one dealing with the multi-channel communication strategy and the other with the strategy for sharing project findings in peer-reviewed journals as publications.
Keywords	Communication, dissemination, publication strategy, communication channels, target audiences, visual identity

Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation, or both.

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Executive Summary

The report is organized into two sections that describe the project's communication and publication methods respectively.

The first section, which is broken down into six subsections, introduces the VALIDATE communication strategy:

- Overview: explains what is meant by the terms "communication" and "dissemination", and gives an overview of what the approach entails.
- Objectives: a list and explanation of the stated objectives.
- Branding and visual identity: an overview of the efforts undertaken to ensure that audiences can recognize the project.
- Focus: a summary of the topics that will be covered in communication and dissemination activities.
- Target audiences: outlines the chosen target populations and elaborates on their selection.
- Channels: describes the several channels for communication and dissemination that are included in the strategy, as well as the associated actions and efforts that are planned for each.

The second section focuses on the VALIDATE publishing approach and includes the following topics:

- The publication policy: how scientific articles' dissemination is controlled (Consortium Agreement, Grant Agreement stipulations)
- The publication plan: an overview of the approaches and actions that will be taken.

1 Purpose of this deliverable

This report is the outcome of project Task 7.4, " Communication and outreach strategy" inside Work Package 7, " Project Management and Communication". Work in T7.4 and WP7 will be performed for the duration of the project's life cycle (M1 to M48). T7.4's objective is to organize all efforts to connect with certain external stakeholders as well as lead and manage all internal and external communication and distribution initiatives. The task calls for the creation of a thorough communication plan that accounts for a variety of audiences, including scientific and academic communities, businesses, stroke patients, people who are at risk, caregivers, and the public. The report details the consortium's agreed-upon communication and dissemination methods for the whole project lifespan.

2 Communication procedure

2.1 Overview

The VALIDATE project's activities of communication and dissemination are horizontal and closely tied to all other work packages and take input from various work tasks according to the ongoing stage of the project.

As outlined by the HorizonEurope Programme, the VALIDATE communication strategy distinguishes between communication and dissemination. Thus, communication is understood as covering the whole project, from the outset of the project and targeting multiple audiences with the purpose of informing and engaging with the broader public. On the other hand, dissemination simply addresses project results and follows findings as they become available, aiming at specialized audiences, and facilitating the adoption and application of results.¹

Both communication and dissemination actions are covered by the VALIDATE communication strategy. All pertinent stakeholders should be informed of the project's goals, plans, and (interim) results from the start onwards.

More specifically, the VALIDATE communication strategy will make sure that communication and dissemination actions (Figure 1):

- Are focused on the audience's needs, using language and information levels appropriate for the audience;
- Make use of a variety of channels, including online ones (the project website and Twitter); in-person events; scientific publications; etc;
- Fully utilize existing resources, connections, and networks;
- Interact with and effectively link to other pertinent projects;
- Are carried out at several geographic outreach levels, ranging from regional to national to European / international.



Figure 1: Overview of communication strategy

¹ Ec.europa.eu. 2022. [online] Available at: <https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/guidance/programme-guide_horizon_en.pdf> [Accessed 17 October 2022].

2.2 Objectives

The main goal of the VALIDATE communication and distribution initiatives is to create a stakeholder model that will aid in systemic transformation. It is crucial to be aware that some stakeholders with a high potential for disruptive innovation, such as health insurance and payment schemes, social and rehabilitation enterprises, and associations for patients and end users, may lack the funds, incentives, or awareness to participate in the current strategic initiatives centered on the VPH Institute or the Avicenna Alliance. One of the main objectives of VALIDATE is to improve this circumstance.

The following communication and distribution goals are considered in this context:

- **Raising awareness:** Making sure that all important activities are communicated (read and understood), particularly to “non-usual suspects”, “outriders,” SMEs, and international stakeholders using specialized means and channels, to raise awareness and eventually elicit feedback.
- **Engagement of key stakeholders:** Maintain the involvement of those who are already involved while also including everyone who should be participating but isn't because of a lack of knowledge, resources, or incentives.
- **Scientific conferences and publications:** VALIDATE is first and foremost a research initiative and will aim to directly feed knowledge to the pertinent research communities as a step in assuring the transfer of medical knowledge to patients.
- **Successful market launch:** Ensure that the previously identified end-user group will have access to project outcomes and products.

2.3 Branding and visual identity

The project's branding policy and visual identity are integral to its communication and dissemination strategy. For this purpose, a project logo as well as deliverable and all communication material, including a website, MS PowerPoint, and Word templates (Figure 2) have been developed in M1 to M6 of the project.

The VALIDATE logo has been developed and distributed to all partners. It will be used in all project-related promotional materials, both online and offline. The Logo and templates share design elements such as the colour scheme with the VALIDATE official website.

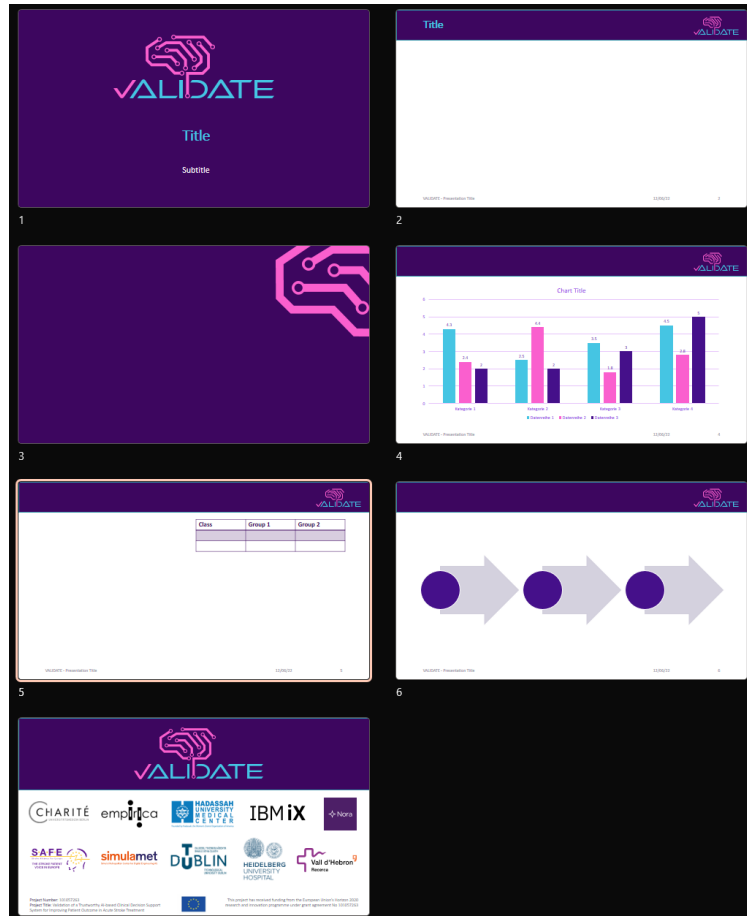


Figure 2: Overview of presentation templates and project logo

Furthermore, EC funding will be appropriately acknowledged through the inclusion of the European emblem accompanied by a statement of acknowledgement in all communication and dissemination activities.

2.4 Focus

Throughout the project's lifespan, the focus of communication and dissemination activities will be adapted, especially in response to the key outputs as they manifest.

Communication and dissemination actions will thus accompany the expected main project outputs:

- the SOP guideline on trustworthy AI development of an AI-based clinical prognostic tool
- the clinical Model Development
- the SOP guideline on model development, validation, and lifecycle management of AI models for prognostic tools and clinical decision support
- the AI-based stroke prognostic demonstrator clinical decision support system
- the implementation and validation of an electronic patient-reported outcome recollection tool;
- the cost-effectiveness and budget-impact framework;
- the commercialization and exploitation plan and business planning;
- the patient engagement and communication.

2.5 Target audiences

A wide range of actors will be included in VALIDATE's communication and dissemination efforts to maximize exposure among various stakeholder groups. To accomplish this, steps have been made to first define the target audiences and groups for communication and dissemination. The Consortium's broad geographic coverage across Europe will make it possible for the project's messages and findings to be disseminated far and wide in a systematic manner. Therefore, planned activities will make a distinction between local/regional, national, European, and international target audiences. Similar to this, messages will be modified to best target the public, private, or public-private sectors.

Among the target audiences identified (in alphabetical order) are: chambers of commerce; financial institutions; industrial players in the domain of health IT and machine learning / artificial intelligence; insurers (including insurance schemes/agencies); investors (both public and private); micro-enterprises; public authorities (e.g., in the health and care fields as well as the large range of authorities concerned with care and lifestyle management to widen the scope of VALIDATE towards prevention measures); the research community (including universities); SMEs; social enterprises; standardisation bodies such as the EMA and the FDA; start-ups; trade unions; user-related associations (covering communities of stroke patients and citizens at risk in European Countries).

The VALIDATE plan also recognizes thematic target populations that can be directly reached by the many project partners, including:

- **Industry organizations and service providers**, such as SMEs working on stroke prevention and treatment products and services; SME associations and clusters; health insurers, etc.
- **User and professional organisations**, such as forums and associations for elderly people, survivors, patients, caregivers, medical professionals, etc.
- **Policy makers and civil servant experts** from public institutions (global, national, regional, local, inside and outside the EU) in charge of projects for broadly defined active and healthy aging.
- **Research institutes, universities, and subject matter experts**, such as organizations and professionals from a variety of fields who deal with stroke, machine learning, and biomedical informatics, as well as academic institutions, consulting firms, and research firms.

Furthermore, a separate target group is represented by the **press and the public at large**. The communication strategy includes building and maintaining a relationship with both specialised and generic media. Media coverage of the project will be documented at the end of each reporting period.

2.6 Channels

Communication and dissemination efforts carried out by the VALIDATE consortia will adopt a multi-channel strategy. The plan will depend on the following elements in particular:

- online communication (project website, social media, press releases, newsletters)
- printed materials (project factsheet, poster)
- public events (webinars, workshops, conferences)
- Scientific publications

The consortium will work closely with the European Commission to communicate and disseminate information through R&D projects backed by the EU, including EC-sponsored scientific and political events, international conferences, seminars, and online social media campaigns. Opportunities for collaboration and generating synergies with other initiatives financed by the EU will be carefully considered.

Each member of the VALIDATE consortium, particularly the Universities and Research Organizations, have the necessary scientific motivation and capacity to contribute to the project's dissemination activities and increase the project's results' long-term sustainability through scientific publications. In addition, the clinical partners are opinion leaders on the stroke and rehabilitation domain and the visibility in various plenary talks will have increased impact.

The following sections explain in more detail the planned actions associated with each channel, with the exception of scientific publications which are elaborated upon in section 3.

2.6.1 Online communication

The VALIDATE online communication strategy is divided maintaining the official project website, the circulation of newsletters and maintaining an active social media presence (i.e. Twitter) for the project. Over the course of the project lifetime, the online communication strategy establishes several progressive milestones that shall be met at the end of each reporting period. **Fehler! Verweisquelle konnte nicht gefunden werden.** lists the suggested threshold indicators.

Indicator	Year 1	Year 2	Year 3	Year 4
# of unique visits to the project website	250	500	1500	3000
# of followers on Twitter by period end (cumulative)	25	75	100	250
# of published Tweets by period end (cumulative)	20	50	80	120

Table 1 Online communication strategy thresholds

Project website

The project website (<https://validate-project.eu/>) is at the centre of VALIDATE's online communication strategy. The website uses a responsive layout and has been built on WordPress as a content

management system. The website has been active since M5 of the project and will be continuously updated with news. A repository (“Resources”) of the project’s public downloadable output is integrated into the website’s structure.

At the end of each reporting period, the website’s analytic data will be consulted to assess whether the targeted number of visits has been met and to gain more insight into website visitors’ profile.

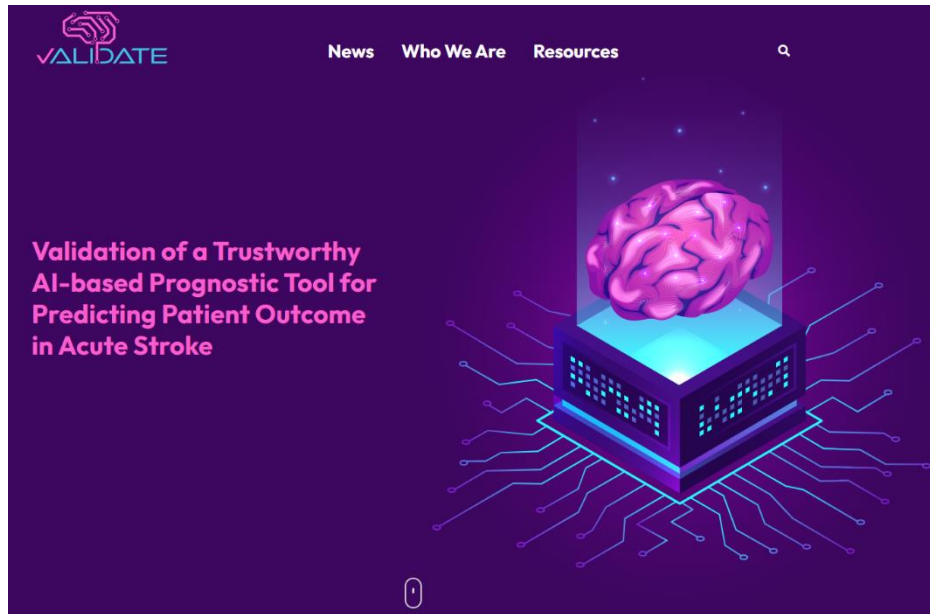


Figure 3 www.validate-project.eu homepage

Social media

Communication and dissemination activities are conceived as a ‘push out’ toward target audiences, however, they can only be deemed successful if the public is given the opportunity to participate and offer feedback. Social media are a particularly effective channel for audience engagement and represent an essential part of the VALIDATE online communication strategy.

A Twitter account ([@VALIDATEproject](https://twitter.com/VALIDATEproject)) was set up and has been active since M1 of the project. Publishing news on the project website will be accompanied by a corresponding announcement on Twitter. Through Twitter, the project can reach out directly to the larger stroke research and patient community, to networks such as the Stroke Alliance for Europe (@StrokeEurope) as well as the various official channels of the European Commission (e.g., @eHealth_EU) and the accounts of consortium members which will serve as multipliers for communicating about the project and disseminating project results. Emphasis will be placed on orchestrating campaigns on Twitter to raise awareness of the project as well as announce project events. These campaigns will make use of specific hashtags and will engage with the broader stroke research community on Twitter. Through Twitter the project will also engage with relevant HorizonEurope campaigns launched by the European Commission through its official accounts. The number of impressions generated by VALIDATE on Twitter, as well as statistics on the number of followers and engagement with the account will be monitored using the free built-in analytic tools of the platform and documented in each period report on communication and dissemination activities.

Partner web channels

The consortium members' websites, social media accounts, and subscription lists will serve as multipliers for the communication operations in VALIDATE. Partners are encouraged to submit further news releases announcing project developments, also in local languages. Additionally, consortium

members are expected to use their professional LinkedIn or ResearchGate profiles to broaden the scope of communication and dissemination efforts once project findings become available.

2.6.2 Public events

The project's strategy includes both organising and participating in a wide range of public events by project partners, from webinars to workshops and conferences. Relevant conferences include the Medical Informatics Europe Conference, Medical Image Analysis, and Frontiers in Neuroscience. The table below depicts a rough plan for event organisation and participation for the project lifecycle.

Selected communication and dissemination indicators (cumulative, indicative)	Year 1	Year 2	Year 3	Year 4
# of scientific papers submitted in international conferences	0	2	6	10
# of workshops/conferences organized by the consortium	0	1	2	3

Table 2 Public events strategy overview

Possible conferences and workshops to participate in:

The name of the conference	Date	Place	Organiser
25th Annual Meeting of The Swiss Stroke Society	26.01.2023-27.01.2023	Neuchâtel, Switzerland	Swiss Stroke Society (SHG)
European Life After Stroke Series 2023	10.03.2023	Barcelona, Spain	Stroke Alliance for Europe (SAFE)
9 th European stroke organisation conference	24.05.2023-26.05.2023	Munich, Germany	The European Stroke Organisation

Table 3 Conferences and workshops overview

Participation in external events

Out of ten partners in VALIDATE, three are directly part of the stroke research community and have committed themselves to submit conference papers and participate in research conferences at both a national and international level throughout the project lifecycle (UKH, VHIR, HMC).

Some of the more prominent HorizonEurope related yearly events the project work could be showcased at include the 'eHealth Week' and the 'European Summit on Digital Innovation for Active and Healthy Ageing'. Other relevant conferences organised annually which would be of interest to the consortium are, for example, FT Digital Health Summit Europe, European Health Forum, World of Health IT and the Digital Silver Forum or the International Conference on Biotechnology and Bioengineering (ICBB). Furthermore, apart from the VPH annual conference, the following specialised conferences have been identified: European Stroke Organisation Conference (ESOC), International Stroke Conference (ISC), International Joint Conference on Artificial Intelligence (IJCAI), Hybrid Intelligent Systems (HIS), International Conference on Machine Learning (ICML), and the Conference on Computational Natural Language Learning (CoNLL).

3 Publication strategy

3.1 Policy

During the Project and for a period of 1 year after the end of the project, the dissemination of own results by one or several parties including but not restricted to publications and presentations shall be governed by the procedure of Article 16 and 17 of the Grant Agreement subject to the following provisions. Furthermore, Article 8.4.2 of the (DESCA-based) Consortium Agreement regulates the dissemination of another partner's unpublished results or background and the cooperation obligations of partners.

- Prior notice of any planned publication shall be given to the other Parties at least 45 calendar days before the publication. Any objection to the planned publication shall be made in accordance with the Grant Agreement in writing to the coordinator and to the party or parties proposing the dissemination within 30 calendar days after receipt of the notice. If no objection is made within the time limit stated above, the publication is permitted.
- The scientific lead will set up a table comprising all planned, pending, submitted and published publications which can be accessed by VALIDATE partners.
- All publications that present results funded through the project shall include after the list of the authors the addition "On behalf of the VALIDATE consortium"
- All publications must acknowledge the funding from the HorizonEurope grant in the acknowledgements including the Grant agreement number 101057263.
- All parties should be rather on the side of inclusion when considering authors from the consortium, i.e., the author list should - while being scientifically justifiable in terms of contribution - include authors rather generously.
- The early notification also aims to encourage other parties to suggest additions to the publications by the inclusion of ideas and/or own work to facilitate interdisciplinary work within the consortium. These suggestions are not binding unless they are official objections. In the latter case, the process outlined under 3.1.1 is to be followed.

3.1.1 Process

- To streamline the process above, first, the party planning to submit an abstract, paper or presentation will notify the scientific lead and innovation management team via emails to dietmar.frey@charite.de, vince_istvan.madai@charite.de and malte.vonTottleben@empirica.com about the publication, its topic, its planned authors and where it will be submitted or presented. The scientific lead will comment on it, will examine the publication for potential conflicts of interests and intellectual property infringements (such as but not limited to 'background information' of the Grant Agreement).
 - *Disclaimer:* This will not be a legal expert examination and approval but a common-sense approach to identify major impediments. Thus, the decision granted by the scientific lead cannot be subject to legal actions such as, but not restricted to, complaints, lawsuits, indictments, patent conflicts, mediation.
- After above mentioned examination is performed, all other parties will be notified about the planned publication according to the consortium agreement. Here, objections can be raised and substantiated. Thus, the responsibility for individual objections regarding conflicts of interests, intellectual property infringements, etc lies with the partners who claim these rights. The scientific lead cannot and will not serve as a supervising agent in these regards of protecting rights and claims of the respective VALIDATE partners.

- An objection is justified if:
 - the protection of the objecting party's results or background would be adversely affected
 - the objecting party's legitimate interests in relation to the results or background would be significantly harmed.

The objection must include a precise request for necessary modifications.

If an objection has been raised, the involved parties shall discuss how to overcome the justified grounds for the objection in a timely basis (for example by amendment to the planned publication and/or by protecting information before publication) and the objecting party shall not unreasonably continue the opposition, if appropriate measures are taken following the discussion.

The objecting party can request a publication delay of not more than 90 calendar days from the time it raises such an objection. After 90 calendar days the publication is permitted.

3.1.2 Open science and open access commitment

VALIDATE understands how crucial it is to give as many people access to the project's research output as feasible. Open science is an approach based on open cooperative work and systematic sharing of knowledge and tools as early and widely as possible in the process. The VALIDATE consortium is committed to Open Science and will comply with all mandatory Open Science practices in Horizon Europe regulated under the Article 17 of the HE General MGA v1.0. Additionally, we will implement several recommended Open Science practices. VALIDATE will implement its open science approach according to the “as open as possible, as closed as necessary” principle, maximizing openness in research while protecting intellectual property and commercialisation efforts. Open science will play an integral role within the proposed methodology and will increase the chances of the project delivering on its objectives. This approach will be realized with the following practices:

Mandatory Open Science Practice	Achieved by
Practice 1: By publication, deposit machine-readable copy of published version in trusted repository	We will deposit manuscripts with immediate open access on the arXiv (Technical content) and medRxiv (Medical content) pre-print servers under a CC-BY license latest at the same time as journal submission. We will add new versions of manuscripts if necessary. Sufficient IPRs to comply with open science requirements will be retained.
Practice 2: Full open access publications.	All original publications will be in full, “gold”, as open access journals (no hybrid or transition journals). We will follow the Directory of open access journals (DOAJ) for quality assurance. We will choose journals with CC-BY license only.
Practice 3: Information on research outputs/tools needed to validate the scientific conclusions or to validate research data.	Open code: Scientific code generated in the project shall be made available on a dedicated public GitHub repository.
Practice 4: Digital or physical access to the	Open data: All data generated in the prospective clinical study, will be made open and accessible on the Zenodo repository. Imaging data will

<p>results needed to validate the conclusions of scientific publications, unless exceptions apply.</p>	<p>follow the Brain Imaging Data Structure (BIDS). The data will be deposited at the end of the project. To ensure commercial exploitation of the results by the consortium the data will be embargoed until 1 year after project end. We include the consent of study participants for anonymous deposition which will allow broad scientific re-use. Will include detailed meta-data, will be under CC 0 license and will follow FAIR principles. Exception: The existing data for retrospective modelling is under data protection, as the patients in the past did not consent for the data to be publicly deposited.</p>
<p>Practice 5: Metadata licensed under CC0 in line with FAIR principles</p>	<p>Metadata of deposited publications will be made openly accessible on the Zenodo repository, in line with the FAIR principles (in particular machine-actionable) and provide information about the following: publication (author(s), title, date of publication, publication venue); Horizon Europe grant project name, acronym and number; licensing terms; persistent identifiers for the publication, the authors involved in the action. Where applicable, the metadata will include persistent identifiers for any research output, or any other tools and instruments needed to validate the conclusions of the publication.</p>

Additionally, we will follow these recommended open science practices: We will *involve all relevant knowledge actors, including citizens*, in the project. We will achieve this by involving the z-inspection trustworthy AI co-creation process, by including the SAFE patient organisation as partner in the consortium, and by participating and organising sessions and satellite events at international scientific conferences and related sector events. We will make *early and open sharing of research* the project norm. We will make sure that all results are made publicly available according to the mandatory practices (pre-print, OA publications) as soon as they are generated. We will choose *open peer-review* journals, whenever appropriate journals are available for the publication topic. We will ensure *output management beyond research data* by making all guidelines, recommendations, requirements, frameworks, and best practice findings public that will be generated as project output. We will commit to *reproducible research* by adhering to best machine learning practices, following guidelines such as the MINIMAR guidelines for AI modelling and will include model cards in our publications. Finally, we will perform *trial pre-registration* for the prospective clinical trial on [clinicaltrials.gov](#), the de facto international standard for trial registration. **In summary**, by following open code and open data policies, all scientific outputs of VALIDATE can be used to externally validate our results. Moreover, the output of our study can be re-used – after the embargo period – for further research. Following the “as open as possible, as closed as necessary” principle, we will not make the final trained models public as they are at the core of following commercial exploitation. Open science requirements are sufficiently fulfilled by our extensive open data and open code policies.

3.2 Planning

The project places great value on disseminating its results to the scientific community, considering that no similar efforts have been undertaken to address the topic of predictive modelling for stroke in the literature. The project’s strategy stipulates scientific papers published both in journals and in conference proceedings over the project lifecycle, as depicted below.

Indicator	Year 1	Year 2	Year 3	Year 4
# of scientific papers submitted to leading journals	0	2	8	15
# of scientific papers published in conference proceedings	0	2	6	6

Table 4 Scientific publication strategy overview

3.2.1 Relevant journals

Several journals relevant to the VALIDATE project (in the field of stroke, neurology, in-silico modelling and machine learning, healthcare, bioinformatics, ICT and data mining technologies, health informatics) have been identified. These will be key journals when submitting papers resulting from the VALIDATE project work. However, journals beyond this list may be targeted where useful.

These are: Genome Research, PLOS Medicine, Journal of Personalized Medicine, Bioinformatics, Journal of Medical Ethics, Social Studies of Science, Journal of the American Medical Informatics Association (JAMIA), Methods of Information in Medicine, Stroke Journal, Journal of Cerebral Blood Flow and Metabolism. For final results journals like the Journal of the American Medical Association JAMA, *New England Journal of Medicine* (NEJM) could be considered.