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# D1.4: Stakeholder Survey

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# Table of contents

Introduction	2
Methodology	2
Distribution	
Results	3
Conclusion	31
EUCAIM Stakeholder Survey Questions	33

# Introduction

The EUropean Federation for CAncer IMages (EUCAIM) project is a central component of Europe's Beating Cancer Plan, aiming to establish a federated infrastructure for cancer imaging and artificial intelligence that will ultimately benefit patients, clinicians, and researchers alike. In September 2023, EUCAIM successfully launched a first public release of the platform. To ensure broad stakeholder engagement and raise awareness, a comprehensive stakeholder survey was implemented.

The primary objective of this survey is to provide insightful findings from the community, guiding the project's direction concerning the integration of AI into cancer infrastructures. The survey targeted potential end-users and stakeholders, encouraging them to share insights that could significantly contribute to understanding user expectations and identifying crucial elements for future engagement and collaboration with the platform.

This deliverable presents comprehensive information regarding the methodology employed, the distribution strategy, the survey results, and concludes with an analysis of the survey outcomes.

# Methodology

The stakeholder survey was jointly compiled by WP8 and EIBIR. Following the completion of the initial draft, it was distributed to both the Management Board and members of WP1 for their input.

The methodology consisted of creating a short survey aimed at reaching potential end-users and stakeholders. The main objective was to gain insights of their expectations on the platform, as well as to identify key elements for their future engagement and collaboration with EUCAIM's platform.

The stakeholder survey was created and disseminated through Jotform, an online platform designed for creating online forms. The EUCAIM's consortium opted for Jotform over other platforms due to its compliance with GDPR regulations, ensuring that all collected data is stored within the confines of the European Union.

To maximise the response rate, the survey was created in a user-friendly way, indicating in the dissemination channels the expected time needed for completion. In order to avoid the survey being excessively long, conditional questions determined whether other questions were displayed or not depending on the answers.

The survey template is added to the end of this document.



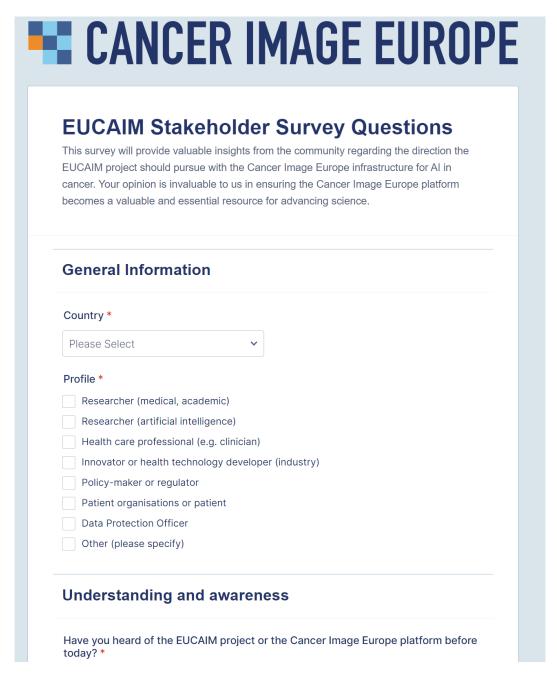


Figure 1. Screenshoft of the survey on Jotform.

# Distribution

On November 17, 2023, EIBIR shared an invitation to participate in the survey via a newsletter update distributed within their network, and reached out to relevant contacts through the European Society of Radiology (ESR) via email. Following this, EIBIR actively promoted the survey on their website and social media platforms, with several project partners and the ESR actively sharing the news on social media also. On November 21, 2023, emails announcing the survey and requesting assistance in dissemination of the survey were sent to EUCAIM's consortium. Various partners shared the information with their contacts as well.

The European Commission also shared the information with their contacts from the European Cancer Imaging Initiative Launch event, and on social media.

#### Results

In this section, the results from the stakeholder survey are presented.



4

The cut-off date used for the preparation of this report is December 19, 2023. The number of respondents was 233 at this point. After cleaning of the survey data, all 233 responses were considered for final analysis. The survey will remain open for responses for an additional month to collect late responses, and the consortium will analyse these answers as well.

The following details provide an overview of the profiles and countries of the respondents.

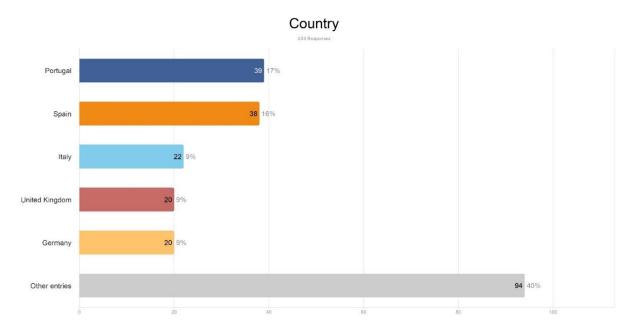


Figure 2. Country overview.

Respondents were mainly located in Europe, with only a small number of respondents from non-European and non-EU countries. While these are currently not eligible to participate in EUCAIM or able to use the Cancer Image Europe platform, their responses where nevertheless included in the analysis, as they provide additional insights. Additionally, after review, these answers were not found to be significant outliers.

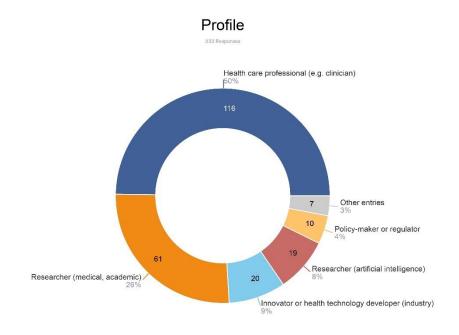


Figure 3. Profile overview.



- Researcher (medical, academic)
  - 61 respondents
- Researcher (artificial intelligence)
  - 19 respondents
- Health care professional (e.g. clinician)
  - 116 respondents
- Innovator or health technology developer (industry)
  - 20 respondents
- Policy-maker or regulator
  - 10 respondents

This covers the vast majority of respondents (97%) and were the groups used for comparison to each other. Responses that fell into other self-reported profiles were included in the overall analysis.

Approximately half of the respondents had heard of the EUCAIM project or the Cancer Image Europe platform before responding to the survey.

Have you heard of the EUCAIM project or the Cancer Image Europe platform before today?

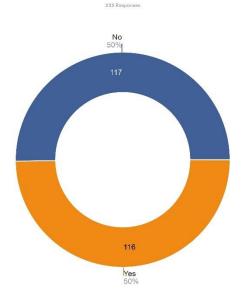


Figure 4. Familiarity.

There were no significant differences to this in the various profile groups.



# On a scale from 1 to 5, how would you rate your understanding of the EUCAIM project's goals and potential impact?

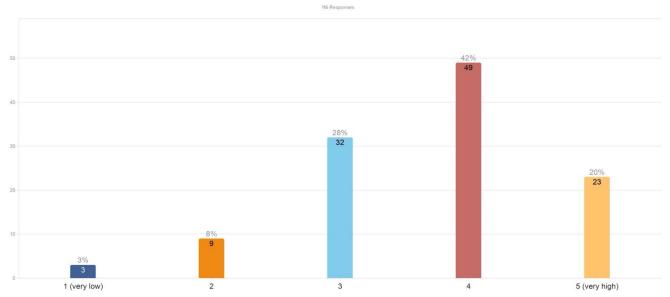


Figure 5. Understanding.

Of the respondents who had heard of the EUCAIM project of the Cancer Image Europe platform prior to participating in the survey, the majority rate their understanding of the EUCAIM project as 4 out of 5, suggesting a generally high level of awareness or knowledge about the project's goals and potential impact.

The mean score of 3.69 indicates that, on average, respondents have more than a moderate understanding of the project.

The distribution skews towards the higher end of the scale, with a noticeable concentration in the 3-4 range.

A small proportion of respondents rate their understanding as either low (2) or very low (1) (combined 10% of respondents). A sizeable proportion of respondents rate their understanding very high (5), which could indicate effective communication and dissemination and widespread reach in the community on one hand, but could also be indicative of close involvement with the project.

We also analyzed the rate of understanding for the main profile groups.

Profile	Count	Mean	Median
Researcher (medical, academic)	37	3.78	4
Researcher (artificial intelligence)	11	4.09	4
Health care professional (e.g. clinician)	47	3.62	4
Innovator or health technology developer (industry)	10	3.50	3
Policy-maker or regulator	7	3.29	4

**Researchers (both medical/academic and AI)** tend to have a higher understanding, with AI researchers showing the highest average rating. **Health care professionals** also display a good level of understanding, slightly lower than researchers.

**Innovators/developers and policy-makers/regulators** show a comparatively lower understanding, with policy-makers having the lowest average rating.

The higher ratings among researchers, particularly in AI, could indicate that the project's technical aspects and goals are well communicated in academic and research circles. The slightly lower ratings among



innovators/developers and policy-makers/regulators suggest a need for more targeted communication or engagement strategies to increase understanding in these sectors.

Understanding the differences in awareness of the EUCAIM project and the Cancer Image Europe platform can help in tailoring communication and engagement strategies to better meet the needs and knowledge levels of different stakeholder groups.

The next question assessed which aspects of the platform are most interesting.

Which aspect of the EUCAIM project and the Cancer Image Europe platform interest you?

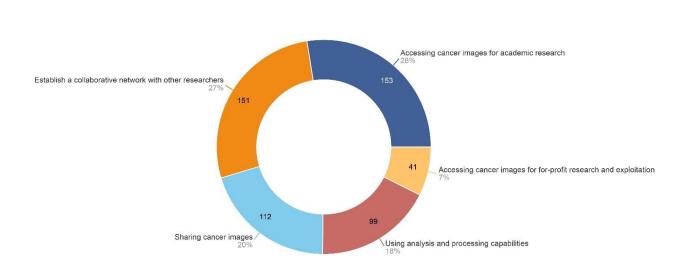


Figure 6. Interests.

Accessing Cancer Images for Academic Research and Establishing Collaborative Networks are the most popular interests across all profile groups, highlighting a strong emphasis on academic collaboration and research.

Looking at the distribution per profile provides further insights:

Profile	Sharing Cancer Images	Accessing for Academic Research	Accessing for For-profit Research	Using Analysis and Processing	Establishing Collaborative Network
Researcher (medical, academic)	31	46	8	21	35
Researcher (artificial intelligence)	10	18	4	5	14
Health care professional (e.g. clinician)	59	74	12	56	79
Innovator or health technology developer (industry)	5	4	13	9	12
Policy-maker or regulator	4	8	3	3	6

Health Care Professionals show a high level of interest in almost all aspects, particularly in sharing cancer images and establishing collaborative networks. Innovators or Health Technology Developers

Deliverable 1.4 7



(Industry) have a notable interest in accessing images for for-profit research and exploitation, aligning with their industry-oriented profiles. **Researchers** (both medical/academic and AI) show strong interests in academic research and collaborative networks, as expected, reflecting their focus on research and development.

The next question assessed the views of the primary goals of EUCAIM.

# In your view, what should be the primary goal of EUCAIM?

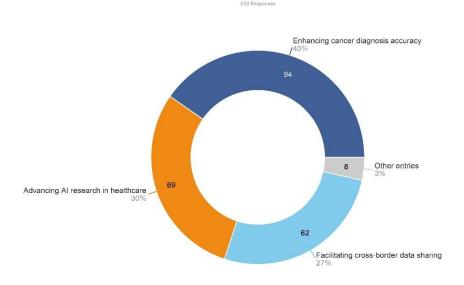


Figure 7. Primary goal.

The top goal across all respondents is **Enhancing Cancer Diagnosis Accuracy**, but this is not significantly ahead of the other two main responses of advancing Al research or facilitating data-sharing.

Analysis across the main profile groups provides further insights:

- Researcher (Medical, Academic): Facilitating cross-border data sharing
- Researcher (Artificial Intelligence): Advancing AI research in healthcare
- Health Care Professional (e.g., Clinician): Enhancing cancer diagnosis accuracy
- Innovator or Health Technology Developer (Industry): Advancing AI research in healthcare
- Policy-maker or Regulator: Facilitating cross-border data sharing

The main goal varies across different profile groups, indicating different priorities and perspectives.

For **Medical and Academic Researchers**, and **Policy-makers or Regulators**, facilitating cross-border data sharing is seen as the primary goal. **Al Researchers** and **Innovators or Developers in the Industry** prioritize advancing Al research in healthcare. **Health Care Professionals** emphasize enhancing cancer diagnosis accuracy.

The variations in perceived primary goal underscore the multi-dimensional nature of the EUCAIM project, catering to a range of stakeholders with different primary objectives. The project's strategies and communications might need to be tailored to address these diverse viewpoints effectively.



The next question contained a statement on how EUCAIM will increase cancer treatment and care and asked respondents to rate this on a scale of 1-5 ranging from strongly disagree (1) to strongly agree (5).

The EUCAIM platform will increase the overall quality of cancer treatment and care for patients across Europe.

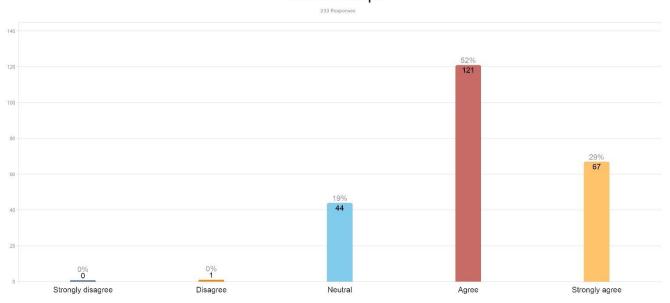


Figure 8. Quality statement.

The mean response was 4.09 (between "Agree" and "Strongly Agree")

We also broke this down per profile group:

Profile	Mean Response	Standard Deviation
Researcher (Medical, Academic)	3.90 (Agree)	0.77
Researcher (Artificial Intelligence)	4.05 (Agree)	0.71
Health Care Professional (e.g., Clinician)	4.16 (Agree)	0.68
Innovator or Health Technology Developer (Industry)	4.25 (Agree)	0.64
Policy-maker or Regulator	4.30 (Agree)	0.48

The majority of respondents, across all groups, agree or strongly agree that the EUCAIM platform will enhance the quality of cancer treatment and care in Europe.

The overall mean rating is closer to "Strongly Agree", indicating a positive consensus on the impact of the EUCAIM platform.

Among the main profile groups, **Policy-makers or Regulators** and **Innovators or Health Technology Developers** show the highest level of agreement, suggesting a strong belief in the potential of the platform among these groups. **Researchers (both medical/academic and Al)** and **Health Care Professionals** also express a high level of agreement, albeit slightly lower than the other groups.

These results suggest optimism and confidence in the EUCAIM platform's ability to improve cancer care across Europe, highlighting its perceived importance and potential impact in the medical and scientific community.



The next question assessed the respondents' opinions on the incorporation of patient perspectives.

Do you think EUCAIM and the Cancer Image Europe platform can incorporate patient perspectives effectively in its research and development processes, considering the sensitive nature of cancer-related data?

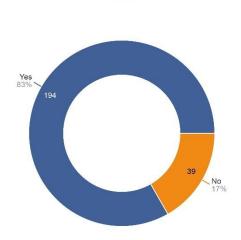


Figure 9. Inclusion of patient perspectives.

The overall response is predominantly affirmative, with a majority believing EUCAIM can effectively incorporate patient perspectives.

We also broke this down per profile group:

Profile	Yes	No
Researcher (Medical, Academic)	87%	13%
Researcher (Artificial Intelligence)	63%	37%
Health Care Professional (e.g., Clinician)	86%	14%
Innovator or Health Technology Developer (Industry)	85%	15%
Policy-maker or Regulator	70%	30%

Al Researchers showed the most skepticism, with a notably lower percentage of affirmative responses compared to other groups.



Next, we assessed whether collaboration between various stakeholders, including patients, can facilitate the development of personalized approaches.

Do you think EUCAIM and the Cancer Image Europe platform can foster collaboration between researchers, clinicians, and other stakeholders, including patients, to facilitate the development of more effective and personalized cancer treatment approaches?

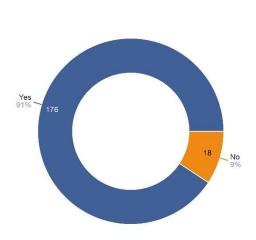


Figure 10. Fostering collaboration.

There is strong confidence across all profile groups in EUCAIM's ability to foster collaboration between various stakeholders, including patients.

We also broke this down per profile group:

Profile	Yes	No
Researcher (Medical, Academic)	91%	9%
Researcher (Artificial Intelligence)	83%	17%
Health Care Professional (e.g., Clinician)	91%	9%
Innovator or Health Technology Developer (Industry)	89%	11%
Policy-maker or Regulator	100%	0%

No significant differences can be seen from the overall confidence. Again, Al researchers show most skepticism and policy-makers and regulators unanimously agree, reflecting a high level of optimism in the collaborative potential of the platform.

For respondents who positively responded to this question, we asked them to elaborate how they believe EUCAIM can contribute to developing more effective and personalized cancer treatment approaches. Common themes from the responses were:

- Enhanced Collaboration and Networking: Respondents express a desire for more collaborative tools and networking opportunities, emphasizing the need for a platform that fosters connections between researchers, clinicians, and industry experts.
- User-Friendly Interface and Accessibility: Many responses indicate a need for a user-friendly and intuitive interface, ensuring that the platform is accessible to users of varying technical expertise.
- **Diverse Data and Research Tools:** There is a call for a diverse range of research tools and data types, including genomic data, clinical trial data, and advanced analytics tools.
- **Integration with Existing Systems:** Integration with existing healthcare and research systems is seen as crucial for the platform's success, with requests for compatibility and interoperability.
- **Training and Education:** Respondents highlight the importance of training and educational resources to help users effectively utilize the platform's features.

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• **Focus on Clinical Application:** A significant number of responses emphasize the need for the platform to have direct clinical applications, aiding in patient care and treatment decisions.

Next, we assessed how important data privacy and security measures are to respondents.

How important are data privacy and security measures in projects like EUCAIM to you?

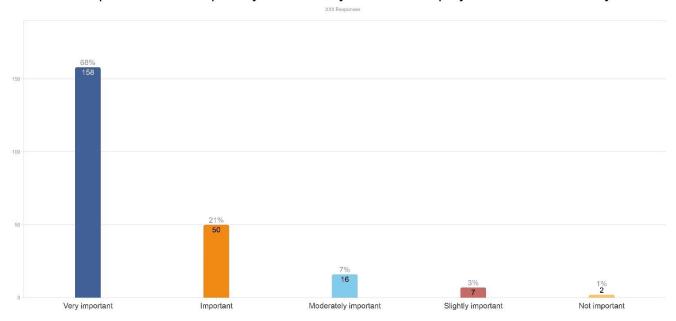


Figure 11. Data privacy and security.

Data privacy and security measures are overwhelmingly viewed as very important by respondents, reflecting a strong emphasis on protecting sensitive data in projects like EUCAIM. The mean response was 4.52 (between "Important" and "Very Important") with a standard deviation of 0.82.

We also broke this down per profile group:

Profile	Mean Response	Standard Deviation
Researcher (Medical, Academic)	4.49 (Important)	0.85
Researcher (Artificial Intelligence)	4.74 (Very Important)	0.45
Health Care Professional (e.g., Clinician)	4.51 (Important)	0.81
Innovator or Health Technology Developer (Industry)	4.40 (Important)	0.94
Policy-maker or Regulator	5.00 (Very Important)	0.00

The importance is consistent across all profile groups, with a particularly strong emphasis from policy-makers and regulators and AI researchers.

The high mean scores for the entire group and across all profiles indicate that data privacy and security are critical considerations for the success and trustworthiness of projects like EUCAIM.

The relatively low standard deviation in most groups suggests a consensus on the importance of these measures.

These results highlight the criticality of robust data privacy and security measures in biomedical research projects, especially those involving sensitive data like cancer patient information. This is a key area of focus for stakeholders across various professional backgrounds in the EUCAIM project.

We also asked respondents to indicate their main concerns regarding data privacy and security:

• **Data Protection Regulations Compliance:** A prevalent concern is compliance with data protection regulations like GDPR. Respondents emphasize the need for strict adherence to legal standards.

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- Risk of Data Breaches: There is significant worry about potential data breaches, with calls for robust security measures and encryption techniques.
- **Patient Confidentiality:** Protecting patient identity and ensuring confidentiality of health data is a major concern. Anonymization and controlled access to data are seen as crucial.
- **Data Sharing Challenges:** Respondents highlight challenges in safe and ethical data sharing, especially across borders, due to varying regulations.
- **Consent and Transparency:** Ensuring informed consent for data usage and maintaining transparency about how data is used are key concerns.
- **Technological Security Solutions:** The need for advanced technological solutions to secure data, prevent unauthorized access, and detect vulnerabilities is emphasized.

The next question assessed the biggest potential barriers to the implementation of EUCAIM's outcomes in the healthcare system.

What do you perceive as the biggest potential barriers to implementing EUCAIM's outcomes in the healthcare system?

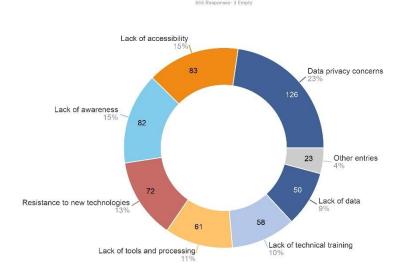


Figure 12. Potential barriers.

Data Privacy Concerns are the most frequently mentioned barrier across all groups, highlighting the significance of ensuring privacy and security in the EUCAIM project. Lack of Accessibility and Awareness are also common concerns, suggesting a need for improved accessibility and increased awareness about the project. Resistance to New Technologies is a notable barrier, indicating the challenge of integrating innovative solutions into existing healthcare systems. Technical Aspects such as tools, processing, and training are also seen as barriers, pointing to the need for adequate technical support and training for effective implementation.

We also broke this down per profile group:

Profile	Lack of Awareness	Lack of Accessibility	Lack of Data	Lack of Tools and Proces sing	Lack of Technical Training	Resistance to New Technologies	Data Privacy Concerns
Researcher (Medical, Academic)	34.43%	37.70%	29.51%	16.39%	19.67%	26.23%	63.93%
Researcher (AI)	42.11%	26.32%	42.11%	21.05%	26.32%	42.11%	47.37%



Health Care Professional	35.34%	39.66%	11.21%	31.90%	30.17%	34.48%	52.59%
Innovator or Developer	40.00%	25.00%	45.00%	30.00%	10.00%	35.00%	55.00%
Policy-maker or Regulator	30.00%	40.00%	10.00%	40.00%	30.00%	10.00%	40.00%

The findings suggest that while there is enthusiasm for the potential of EUCAIM, addressing data privacy, enhancing accessibility and awareness, overcoming resistance to new technologies, and providing adequate technical support are crucial for the successful implementation of its outcomes in the healthcare system.

Next, we assessed if and how respondents would contribute to the Cancer Image Europe platform.

# Would you consider using or contributing to the Cancer Image Platform?

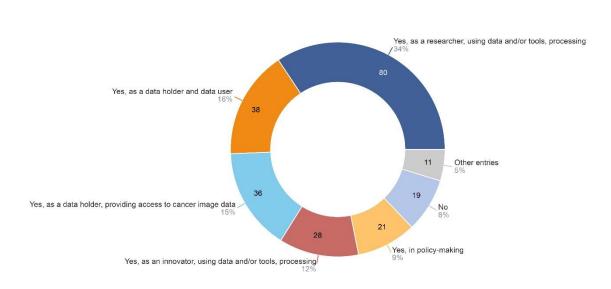


Figure 13. Contribution to the platform.

The analysis of the responses reveals the following insights:

- Most Engaged Category: The highest number of respondents identified themselves as researchers using data and/or tools for processing, with a total of 80 responses. This indicates a strong interest and involvement from the research community in utilizing the resources provided by the EUCAIM project.
- 2. **Data Holders and Users**: The second most common response, with 38 counts, was from participants who are both data holders and data users. This dual role suggests a significant portion of stakeholders are engaged in both contributing to and utilizing the project's resources.
- 3. **Data Providers**: There were 36 respondents who identified themselves solely as data holders providing access to cancer image data. This group is crucial for the project as they supply the foundational data necessary for research and innovation.
- 4. **Innovators' Involvement**: Innovators using data and/or tools for processing constituted 28 responses. Their involvement is key to translating research and data into practical applications and technologies.
- 5. **Policy-making Engagement**: 21 respondents were involved in policy-making, highlighting the project's reach and impact on health and research policy sectors.

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- 6. **Limited Negative Responses**: Only 19 respondents answered 'No', indicating limited disengagement or non-involvement with the project.
- 7. **Diverse Other Responses**: A variety of other responses were noted, including those who see themselves in multiple roles or have specific conditions for their involvement. This diversity reflects the complex ecosystem of stakeholders in the biomedical imaging and cancer research fields.

From this analysis, it is evident that the EUCAIM project engages a diverse range of stakeholders, with a strong representation from researchers and those involved in both holding and using data. The involvement of innovators and policy-makers also signifies the project's comprehensive impact across different sectors related to cancer research and data utilization.

The breakdown of responses per the main profile groups is as follows:

Profile	As a researcher, using data/tools, processing	As a data holder and data user	As a data holder, providing cancer image data	In policy- making	As an innovator, using data/tools, processing	No
Researcher (medical, academic)	34	9	7	3	1	3
Researcher (AI)	25	6	2	0	0	1
Healthcare Professional	31	23	27	0	0	10
Innovator (Industry)	1	0	0	0	19	0
Policy-maker	1	0	1	6	0	2

**Researchers (Medical, Academic)**: Predominantly engaged as researchers using data/tools for processing (34 responses), with some involvement as data holders/users (9 responses).

**Researchers (AI)**: Similar to medical researchers, predominantly engaged in using data/tools for processing (25 responses), but with a smaller presence as data holders/users (6 responses).

**Healthcare Professionals**: A balanced involvement across using data/tools for processing (31 responses) and providing cancer image data (27 responses), along with a significant role as data holders/users (23 responses).

**Innovators (Industry)**: Mainly involved as innovators using data/tools for processing (19 responses), indicating a strong focus on applying data for innovative solutions.

**Policy-makers**: More focused on policy-making (6 responses) with limited involvement in other areas.

These results provide valuable insights into the engagement levels and roles of different stakeholder groups in the context of the EUCAIM project.

The next questions are statements where respondents indicate how much they agree on a scale of 1-5 ranging from strongly disagree (1) to strongly agree (5).

First, we assessed whether respondents feel like EUCAIM's outcomes would be valuable to their organization due to the secure access to cancer image data.



# An infrastructure that enables secure access to cancer image data would be valuable to my organisation.

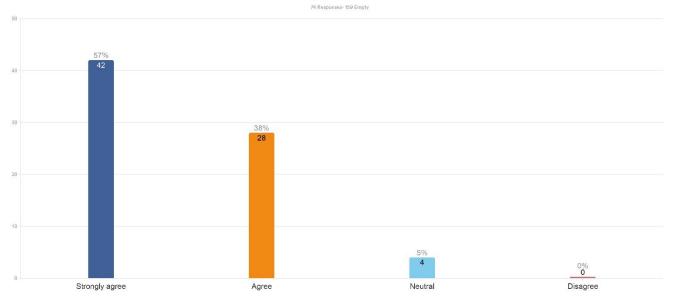


Figure 14. Value of secure access.

Median: 5.0Mean: 4.51

Standard Deviation: 0.60

These values suggest a strong overall agreement among the respondents regarding the value of an infrastructure for secure access to cancer image data.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	5.0	4.56	0.63	16
Researcher (artificial intelligence)	4.0	4.00	0.71	5
Health care professional (e.g., clinician)	5.0	4.54	0.58	50
Innovator or health technology developer (industry)	4.5	4.50	0.71	2
Policy-maker or regulator	5.0	5.00	-	1

**Policy-makers or regulators** show the highest level of agreement (mean of 5.00), indicating a unanimous perception of the value of such infrastructure in their field. However, as this is based on a single response, this may not be a representative answer. **Researchers in medical and academic fields**, as well as **health care professionals**, also demonstrate a high level of agreement (median and mean around 5.0), reflecting a strong consensus on the importance of secure access to cancer image data in these sectors. **Researchers in artificial intelligence** show a slightly lower level of agreement (median of 4.0 and mean of 4.00), suggesting some variations in opinions within this group. **Innovators or health technology developers** have a median of 4.5 and mean of 4.50, indicating a general agreement but with some reservations or variability in opinions. As this is based on only 2 responses, it is unclear how representative this is.

These findings highlight the perceived importance of secure access to cancer image data across various professional sectors, especially among medical researchers, and health care professionals, and potentially policy-makers. The slightly lower agreement among AI researchers (and technology developers) might reflect specific needs or considerations in their fields that are not fully addressed by the current infrastructure proposals.

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The next statement assessed the facilitation of access to multicentric imaging data.

# The Cancer Image Europe platform will facilitate my organisation to have access to multicentric cancer image data.

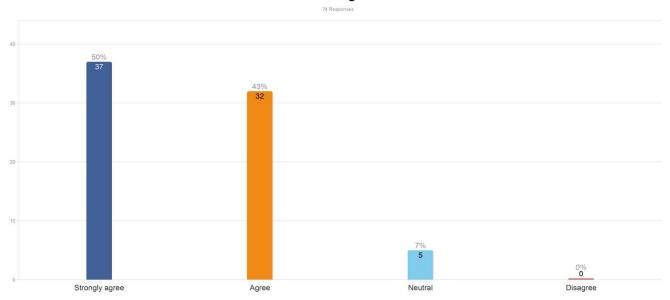


Figure 15. Access to multicentric studies.

Median: 4.5Mean: 4.43

Standard Deviation: 0.62

These values indicate a general agreement among respondents about the platform's role in facilitating access to multicentric cancer image data, though with slightly more variation in responses compared to the previous question.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	4.38	0.62	16
Researcher (artificial intelligence)	4.0	4.00	0.71	5
Health care professional (e.g., clinician)	5.0	4.46	0.61	50
Innovator or health technology developer (industry)	5.0	5.00	0.00	2
Policy-maker or regulator	5.0	5.00	-	1

Innovators or health technology developers and policy-makers or regulators show very strong agreement (mean of 5.00), reflecting a unanimous perception of the platform's utility in their fields. However, this is again based on a very limited number of responses. **Health care professionals** also demonstrate strong agreement (mean of 4.46), though with some variability in responses. **Researchers in both medical, academic, and artificial intelligence fields** show moderate agreement, with means of 4.38 and 4.00, respectively. This indicates a positive view of the platform's potential but with some more reservations or diverse opinions within these groups.

Overall, the responses suggest that most stakeholders see the Cancer Image Europe platform as a valuable tool for accessing multicentric cancer image data, particularly among health technology developers, policy-makers, and clinicians. The slightly lower agreement among researchers, particularly in artificial intelligence, may suggest specific needs or concerns in these fields that the platform might need to address more effectively.



#### The next statement assessed time and cost-savings for new data collections and research.

The Cancer Image Europe platform will reduce the time (and associated costs) needed for my organisation to generate new multicentric data collections in response to a specific Research Question.

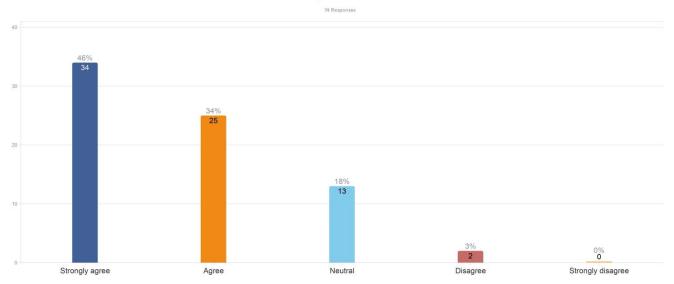


Figure 16. Cost- and time-savings.

Median: 4.0Mean: 4.23

Standard Deviation: 0.84

These values indicate a general agreement among respondents regarding the platform's potential to reduce time and costs in generating new multicentric data collections. However, the higher standard deviation suggests more variability in responses compared to previous questions.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	4.06	0.93	16
Researcher (artificial intelligence)	4.0	3.80	1.10	5
Health care professional (e.g., clinician)	4.0	4.28	0.78	50
Innovator or health technology developer (industry)	5.0	5.00	0.00	2
Policy-maker or regulator	5.0	5.00	-	1

Innovators or health technology developers and policy-makers or regulators show a strong level of agreement (mean of 5.00), reflecting a unanimous belief in the platform's efficiency in reducing time and costs. Again, it is to be noted that this represents a very small sample size and this the responses may not be representative.

**Health care professionals** show a generally positive view (mean of 4.28) with some variability, indicating overall agreement but with some reservations. **Researchers in both medical and artificial intelligence fields** show moderate agreement, with means of 4.06 and 3.80, respectively. This suggests a recognition of potential benefits, but with more variability and possibly some skepticism or specific concerns.

Overall, the responses suggest that most stakeholders perceive the Cancer Image Europe platform as a beneficial tool for reducing time and costs in generating new data collections, particularly among technology developers and policy-makers (if the responses are representative). The varied responses among researchers, particularly in artificial intelligence, may indicate a need for more targeted communication or features that address their specific concerns and needs.

Deliverable 1.4



The next statement assessed whether tools for data discovery and data access will be provided by the Cancer Image Europe platform.

Cancer Image Europe will provide my organisation with tools to facilitate data discovery and data access.

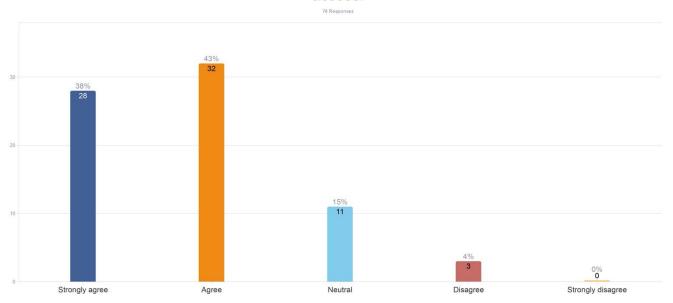


Figure 17. Data discovery and access.

Median: 4.0Mean: 4.15

Standard Deviation: 0.82

These values indicate a general agreement among respondents about the platform's potential to provide tools for data discovery and access, with a moderate level of variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	3.81	0.83	16
Researcher (artificial intelligence)	3.0	3.40	1.14	5
Health care professional (e.g., clinician)	4.0	4.28	0.73	50
Innovator or health technology developer (industry)	5.0	5.00	0.00	2
Policy-maker or regulator	5.0	5.00	-	1

Innovators or health technology developers and policy-makers or regulators show strong agreement (mean of 5.00), suggesting a high level of confidence in the platform's capabilities in data discovery and access. Again, it is important to note that the sample size remains small. Health care professionals also show a positive view (mean of 4.28), indicating general agreement with some variability in perspectives. Researchers in medical and academic fields have a moderate level of agreement (mean of 3.81), suggesting some reservations or a need for more specific features to meet their needs. Researchers in artificial intelligence demonstrate the lowest level of agreement (mean of 3.40), which may indicate significant concerns or specific requirements that are not adequately addressed by the platform as perceived.

Overall, the responses suggest that while there is a general recognition of the potential benefits of Cancer Image Europe in providing data discovery and access tools, there are varying levels of confidence across different stakeholder groups. Particularly, researchers, especially in artificial intelligence, may require more targeted features or reassurances about the platform's capabilities to fully meet their expectations.

Deliverable 1.4



The next question assessed whether the Cancer Image Europe platform will provide tools for distributed processing.



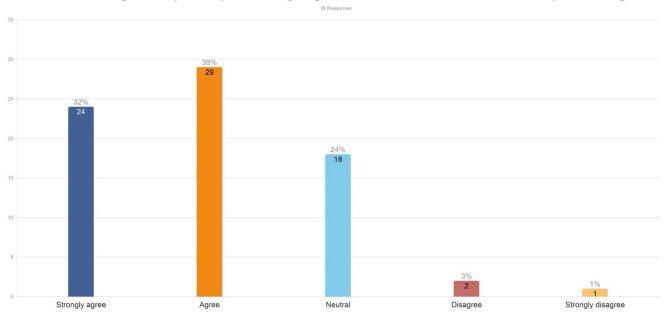


Figure 18. Tools for distributed processing.

Median: 4.0Mean: 4.03

Standard Deviation: 0.83

These values suggest a general agreement among the respondents about the platform's potential to provide tools for distributed processing, with a moderate level of variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	3.0	3.56	0.89	16
Researcher (artificial intelligence)	3.5	3.50	0.58	5
Health care professional (e.g., clinician)	4.0	4.16	0.77	50
Innovator or health technology developer (industry)	5.0	5.00	0.00	2
Policy-maker or regulator	5.0	5.00	-	1

Innovators or health technology developers and policy-makers or regulators show a high level of agreement (mean of 5.00), indicating strong confidence in the platform's capabilities for distributed processing. It is however not known how representative this is due to the small sample size. Health care professionals also exhibit positive agreement (mean of 4.16), though with some variability, reflecting a generally favorable view. Researchers in medical and academic fields, as well as those in artificial intelligence, show more moderate levels of agreement (means of 3.56 and 3.50, respectively). This suggests some reservations or specific needs that may not be fully addressed by the platform.

Overall, the responses indicate that while there is a general recognition of the benefits of distributed processing tools provided by Cancer Image Europe, there are varying levels of enthusiasm across different stakeholder groups. The lower levels of agreement among researchers could imply a need for more detailed information or targeted features to address their specific concerns and requirements.



The next statement assessed whether a secure processing environment simplifies legal and ethical compliance

The secure processing environment will facilitate and simplify my organisation's legal and ethical complience in the use of cancer image data.

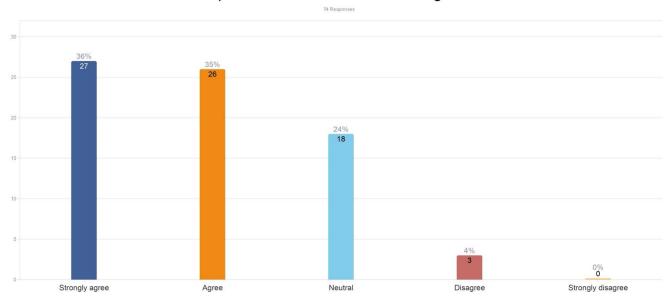


Figure 19. Secure processing and ethicolegal compliance.

Median: 4.0Mean: 4.04

Standard Deviation: 0.88

These values suggest a general agreement among the respondents about the platform's potential to facilitate and simplify legal and ethical compliance in using cancer image data, with a moderate level of variability in responses.

## **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	3.0	3.56	0.89	16
Researcher (artificial intelligence)	3.0	3.40	1.14	5
Health care professional (e.g., clinician)	4.0	4.20	0.78	50
Innovator or health technology developer (industry)	5.0	5.00	0.00	2
Policy-maker or regulator	5.0	5.00	-	1

Innovators or health technology developers and policy-makers or regulators show strong agreement (mean of 5.00), though it is important to note the small number of responses in these groups. **Health care professionals** also demonstrate a positive view (mean of 4.20) with a notable number of responses (50), suggesting a widely held belief in the platform's compliance facilitation capabilities. **Researchers in medical, academic, and artificial intelligence fields** show more moderate levels of agreement (means of 3.56 and 3.40, respectively), indicating some reservations or specific concerns about the platform's ability to simplify legal and ethical compliance.

Overall, while there is a general recognition of the benefits of the Cancer Image Europe platform in facilitating compliance, the varying levels of agreement and the number of responses highlight the more diverse perspectives of different stakeholder groups.



The next statement assessed whether secure and controlled data sharing would be a valuable asset.

An infrastructure that enables secure and controlled data sharing would be valuable to my organisation.

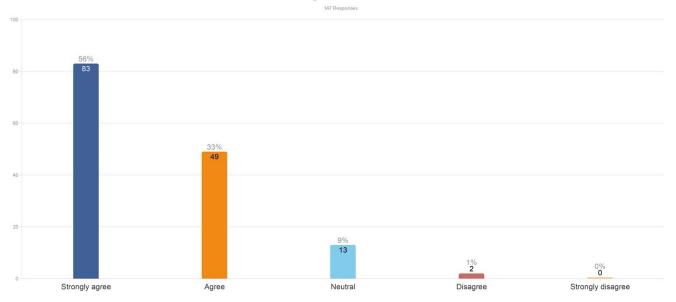


Figure 20. Value of secure and controlled data sharing.

Median: 5.0Mean: 4.45

Standard Deviation: 0.71

These values indicate a strong agreement among respondents about the value of secure and controlled data sharing infrastructure, with a relatively low level of variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	5.0	4.48	0.59	44
Researcher (artificial intelligence)	5.0	4.53	0.84	19
Health care professional (e.g., clinician)	5.0	4.35	0.77	68
Innovator or health technology developer (industry)	5.0	4.71	0.61	14
Policy-maker or regulator	4.0	4.00	-	1

All profile groups show a high level of agreement, with a median of 5.0, reflecting a widespread recognition of the importance of secure and controlled data sharing. Innovators or health technology developers show the highest mean (4.71), indicating strong confidence in the value of such infrastructure. Researchers in both medical, academic, and artificial intelligence fields demonstrate high levels of agreement (mean above 4.4), suggesting a strong consensus on the importance of secure data sharing in research. Health care professionals also show strong agreement, though with a slightly lower mean (4.35), indicating general support with some variability in opinions. Policy-makers or regulators, though with only one response, show a slightly lower level of agreement (mean of 4.00).

Overall, the responses indicate a widespread acknowledgment of the value of secure and controlled data sharing infrastructure across various professional sectors, highlighting its perceived importance for facilitating efficient and compliant data usage.



The next statement assessed whether Cancer Image Europe would aid in making datasets (more) FAIR.

The Cancer Image Europe platform will make my organisation's datasets (more) FAIR (findable, accessible, interoperable and re-useable), through the mapping to a common hyperontology and the harmonisation of multicentric imaging data. This attracts the interest of potential data users.

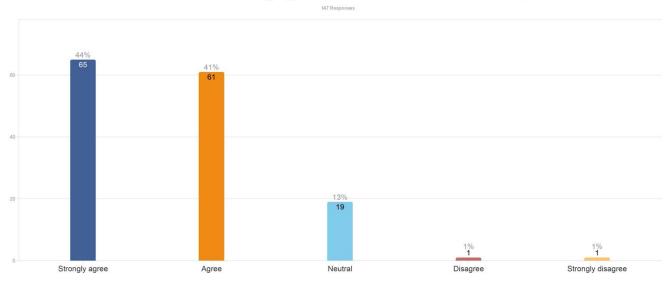


Figure 21. FAIRness.

Median: 4.0Mean: 4.30

Standard Deviation: 0.72

These values indicate a general agreement among respondents about the platform's potential to make datasets more FAIR, with a moderate level of variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	4.33	0.68	43
Researcher (artificial intelligence)	4.0	4.32	0.67	19
Health care professional (e.g., clinician)	4.0	4.26	0.75	68
Innovator or health technology developer (industry)	4.5	4.36	0.84	14
Policy-maker or regulator	4.0	4.00	-	1

All profile groups show a good level of agreement (mean around 4.3), indicating a widespread belief in the benefits of the platform for making data FAIR. Innovators or health technology developers show slightly higher agreement (mean of 4.36), suggesting stronger confidence in the platform's capabilities. Researchers, both in medical, academic, and artificial intelligence fields, as well as health care professionals, demonstrate similar levels of agreement, indicating a general consensus on the importance of FAIR data principles. Policy-makers or regulators, despite only having one response, align with the general agreement seen in other groups.

Overall, the responses suggest a broad acknowledgment across different stakeholders to enhance the FAIRness of datasets. This is seen as a valuable feature due to its importance in facilitating data sharing, collaboration, and innovation in the field of cancer research and treatment.



## The next statement assessed whether long-term sustainability of data collections is facilitated.

EUCAIM and Cancer Image Europe platform will facilitate that my organisation achieves long-term sustainability for the data collections generated in the context of European or publicly funded research projects, after the project ends.

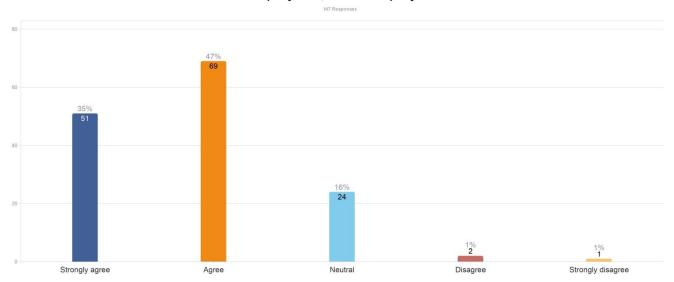


Figure 22. Sustainability of data collections.

Median: 4.0Mean: 4.15

Standard Deviation: 0.74

These values indicate a general agreement among respondents about the platform's potential to facilitate long-term sustainability for data collections, with a moderate level of variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	4.12	0.73	43
Researcher (artificial intelligence)	4.0	4.26	0.73	19
Health care professional (e.g., clinician)	4.0	4.15	0.74	68
Innovator or health technology developer (industry)	4.0	4.29	0.61	14
Policy-maker or regulator	2.0	2.00	-	1

Researchers in both medical, academic, and artificial intelligence fields, health care professionals, and innovators or health technology developers show a good level of agreement (mean around 4.1 to 4.3), suggesting a belief in the platform's role in achieving long-term sustainability of data collections. Policy-makers or regulators show a significantly lower level of agreement (mean of 2.00), but this is based on only one response, which limits the generalizability of this insight.

The agreement across most profile groups indicates recognition of the importance of sustainability in research data management, with the platform seen as a potential facilitator in this regard.

Overall, the responses suggest that there is a general acknowledgment across stakeholders of the potential of EUCAIM and the Cancer Image Europe platform to support the long-term sustainability of data collections post-project.



## The next statement assessed whether alignment of health data for secondary use is facilitated.

Cancer Image Europe will facilitate that my organisation is better aligned with an institutional, regional or national positioning on contributing our healh data for secondary use.

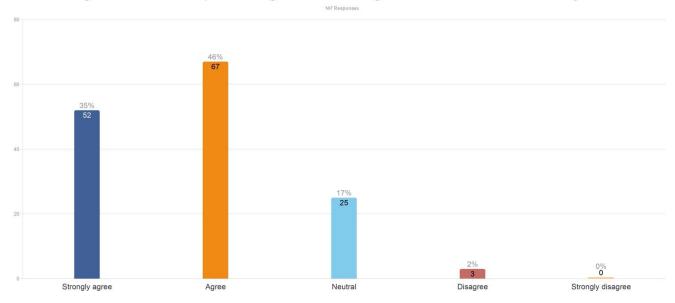


Figure 23. Secondary use of data.

Median: 4.0Mean: 4.14

Standard Deviation: 0.77

These values indicate a general agreement among respondents about the platform's potential to align organizations with broader data contribution initiatives, with moderate variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	4.14	0.77	44
Researcher (artificial intelligence)	4.0	3.89	0.94	19
Health care professional (e.g., clinician)	4.0	4.22	0.73	68
Innovator or health technology developer (industry)	4.0	4.07	0.73	14
Policy-maker or regulator	4.0	4.00	-	1

**Most profile groups** demonstrate a good level of agreement (mean around 4.1 to 4.2), suggesting a recognition of the platform's role in supporting alignment with institutional, regional, or national data contribution strategies. **Researchers in artificial intelligence** show a somewhat lower level of agreement (mean of 3.89), which might indicate specific needs or concerns in this field regarding data alignment, or indicate that their own systems are already sufficient. **Health care professionals** exhibit a relatively higher level of agreement (mean of 4.22), reflecting their opinion of the platform's potential in this area, or that their own systems do not already provide such alignment.

Overall, the responses suggest that there is a general belief across various stakeholders in the potential of Cancer Image Europe to facilitate better alignment with broader data contribution policies and strategies.



## The next statement assessment whether compliance with EHDS is facilitated.

EUCAIM will facilitate that my organisation complies with the future European Health DataSpace (EHDS) regulation.

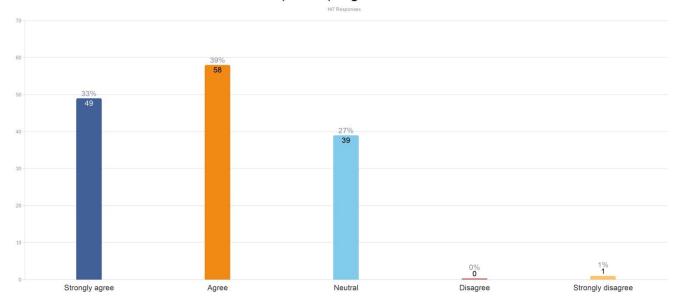


Figure 24. EHDS compliance.

Median: 4.0Mean: 4.06

Standard Deviation: 0.77

These values suggest a general agreement among respondents regarding EUCAIM's role in facilitating compliance with the upcoming EHDS regulation, with moderate variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	4.05	0.78	44
Researcher (artificial intelligence)	4.0	3.89	0.74	19
Health care professional (e.g., clinician)	4.0	4.18	0.77	68
Innovator or health technology developer (industry)	4.0	3.79	0.80	14

**Most profile groups** demonstrate a good level of agreement (mean around 4.0 to 4.2), suggesting they find EUCAIM effective in aiding compliance with EHDS regulation. **Researchers in artificial intelligence** and **innovators or health technology developers** show slightly lower agreement (means of 3.89 and 3.79 respectively), indicating some reservations or specific concerns in these fields. **Health care professionals** exhibit the highest level of agreement (mean of 4.18).

There were no responses from **policy-makers or regulators**, which limits insights into their perspective.

Overall, the responses suggest a general acknowledgment across stakeholders of the potential of EUCAIM to support compliance with the EHDS regulation.



## The next statement assessed whether collaboration opportunities are promoted or increased.

Access to the infrastructure will promote participation of my organisation in large-scale, multicentric studies, contributing to my organisation's recognition and collaboration opportunities.

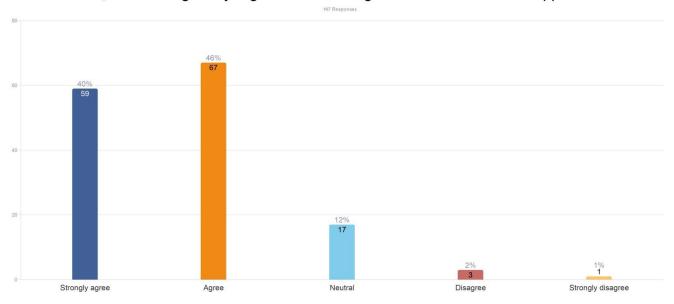


Figure 25. Increase in collaboration opportunities.

Median: 4.0Mean: 4.24

Standard Deviation: 0.74

These values suggest a general agreement among respondents about the infrastructure's potential to enhance participation in multicentric studies and increase recognition and collaboration opportunities, with moderate variability in responses.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of Responses
Researcher (medical, academic)	4.0	4.30	0.77	43
Researcher (artificial intelligence)	4.0	4.32	0.58	19
Health care professional (e.g., clinician)	4.0	4.21	0.74	68
Innovator or health technology developer (industry)	4.0	4.14	0.86	14
Policy-maker or regulator	4.0	4.00	-	1

Most profile groups show strong agreement (mean around 4.2 to 4.3), indicating a widespread belief in the benefits of the infrastructure for enhancing participation in multicentric studies and boosting recognition. Researchers in both medical, academic, and artificial intelligence fields demonstrate a particularly positive view. Health care professionals and innovators or health technology developers also show good agreement, though with slightly lower means. The response from the policy-maker or regulator aligns with the general agreement seen in other groups, though it is based on a single response.

Overall, the responses suggest that there is a general acknowledgment across stakeholders of the infrastructure's potential to promote participation in significant studies and enhance collaboration and recognition opportunities.



## The next statement assessed the willingness to pay for features or services.

Would you or your organisation be willing to pay for access to advanced features or services provided by the EUCAIM platform?

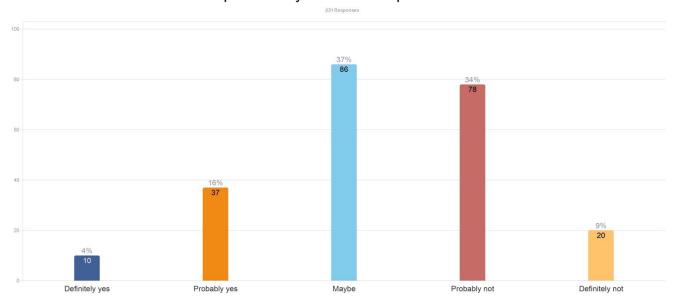


Figure 26. Willingness to pay.

Median: 3.0Mean: 2.73

Standard Deviation: 0.98

These values suggest a moderate inclination towards willingness to pay for advanced features or services, with the median at "Maybe" and the mean slightly below 3, indicating a balance between willingness and reluctance.

#### **Breakdown by Main Profile Groups**

Profile Group	Median	Mean	Standard Deviation	Number of responses
Researcher (medical, academic)	3.0	2.66	0.96	61
Researcher (artificial intelligence)	3.0	3.00	0.94	19
Health care professional (e.g., clinician)	3.0	2.75	0.93	116
Innovator or health technology developer (industry)	3.0	3.20	1.06	20
Policy-maker or regulator	2.0	2.10	0.99	10

Researchers in medical, academic, and artificial intelligence fields, as well as health care professionals, generally show a moderate willingness to pay, with means around 2.66 to 3.00.

**Innovators or health technology developers** demonstrate a slightly higher willingness (mean of 3.20), suggesting more openness to paying for advanced features.

**Policy-makers or regulators** show a lower level of willingness (mean of 2.10), indicating more reluctance compared to other groups.

Overall, while there is some openness to paying for advanced features or services, it is not overwhelmingly strong across any of the groups. This suggests that while there is interest, the decision to pay for such features may depend on factors like perceived value, budget constraints, or the availability of alternatives. The platform may need to consider these varied levels of willingness when developing and pricing advanced features or services.



# The next question assessed what incentives would most encourage contribution of data or tools.

What incentives would most encourage you to contribute data or tools to the EUCAIM platform?

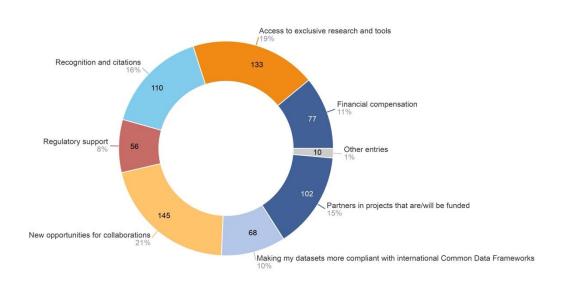


Figure 27. Incentives for contribution.

#### **Counts by Main Profile Groups**

## Researcher (medical, academic):

Most interested in new opportunities for collaborations (42 responses).

Recognition and citations, and partners in projects also significant (33 and 30 responses, respectively).

#### Researcher (artificial intelligence):

Most interested in new opportunities for collaborations (14 responses).

Access to exclusive research and tools, and partners in projects also notable (10 and 9 responses, respectively).

#### Health care professional (e.g., clinician):

High interest in access to exclusive research and tools (71 responses).

New opportunities for collaborations and recognition and citations also prominent (67 and 64 responses, respectively).

## Innovator or health technology developer (industry):

New opportunities for collaborations and partners in projects lead (13 and 11 responses).

Access to exclusive research and tools also significant (10 responses).

#### Policy-maker or regulator:

New opportunities for collaborations and regulatory support are most encouraging (6 and 5 responses).

Across all profile groups, new opportunities for collaborations and access to exclusive research and tools are highly valued incentives.

Deliverable 1.4 29



Financial compensation is more important to health care professionals.

Recognition and citations are particularly valued by researchers in medical and academic fields, highlighting the importance of academic credit and visibility.

Regulatory support and compliance with international data frameworks are less emphasized overall but still significant for specific groups like clinicians and policy-makers.

These findings suggest a diverse range of motivations or incentives across different groups, with collaboration opportunities, access to exclusive resources, and recognition being key drivers incentivizing contribution to platform. This diversity highlights the need for a multi-faceted approach in incentivizing data or tool contributions to the platform.

#### The next question asked respondents for features that should be included.

After reviewing the 41 valid open-text responses, common requests for additional features in the EUCAIM project are:

- 1. **Enhanced Al and Machine Learning Capabilities:** Several respondents emphasized the need for advanced Al and machine learning tools, specifically for data analysis and predictive modeling in cancer research.
- 2. **Improved Data Integration and Sharing:** A common request was for better integration and sharing capabilities, including interoperable platforms that allow for seamless data exchange across different healthcare systems and research institutions.
- 3. **Robust Privacy and Security Measures:** Respondents highlighted the importance of robust privacy and security features, ensuring that patient data is protected, especially in the context of GDPR and other data protection regulations.
- 4. **User-Friendly Interface and Accessibility:** The need for a user-friendly interface was mentioned, suggesting that the platform should be accessible to users with varying levels of technical expertise.
- 5. **Support for Collaborative Research:** Many expressed a desire for features that support collaborative research, such as tools for joint data analysis, shared repositories, and platforms for networking and partnership building.
- 6. **Comprehensive Data Analytics Tools:** There was a notable interest in comprehensive data analytics tools, including advanced visualization, statistical analysis capabilities, and real-time data processing.
- 7. **Focus on Clinical Applications:** A significant number of respondents wanted the platform to have a strong focus on clinical applications, including decision support systems, diagnostic tools, and patient management systems.
- 8. **Regulatory Compliance Assistance:** Some responses indicated the need for assistance in navigating regulatory landscapes, suggesting features that help in making datasets compliant with international standards and regulations.
- 9. **Training and Educational Resources:** Respondents also sought training and educational resources, including tutorials, workshops, and documentation to help users maximize the potential of the platform.
- 10. **Customization and Modular Features:** The desire for customizable and modular features was evident, where users can tailor the platform according to their specific project needs.

There is a clear demand for technological advancement, particularly in AI and data analytics, tailored to both research and clinical needs. The integration of data sharing and collaborative tools indicates a trend towards more interconnected and cooperative research environments.



Security, privacy, and regulatory compliance are top priorities, reflecting the sensitive nature of health data.

Accessibility and user-friendliness are essential, ensuring the platform is inclusive and beneficial to a wide range of users.

The final questioned asked respondents for any additional feedback.

After carefully reviewing the 22 valid responses asking for additional feedback, we have identified some common themes:

- 1. **Need for Wider Collaboration:** Several respondents emphasized the importance of broader collaboration, including partnerships with various stakeholders like healthcare providers, researchers, and industry players.
- Focus on User-Friendliness: A common theme was the need for the EUCAIM platform to be user-friendly and accessible to users with different levels of technical expertise, emphasizing ease of use and intuitive interfaces.
- 3. **Integration with Existing Systems:** Some respondents highlighted the importance of ensuring the platform's compatibility and integration with existing systems and databases in healthcare and research.
- 4. **Data Privacy and Security Concerns:** There were concerns about data privacy and security, with suggestions for robust measures to protect sensitive information, especially in light of GDPR and other regulations.
- 5. **Enhancing Data Quality and Standards:** The need for high-quality, standardized data was a recurring theme, with suggestions for the platform to enforce data quality checks and standardization protocols.
- 6. **Support for Diverse Research Needs:** Respondents expressed a desire for the platform to support a wide range of research needs, from basic science to clinical trials, with flexible tools and features.
- 7. **Sustainability and Funding:** Issues related to the sustainability and long-term funding of the platform were raised, with suggestions for exploring various funding models.
- 8. **Regulatory Compliance and Guidance:** Some responses indicated a need for the platform to provide guidance on regulatory compliance, especially for cross-border data sharing and collaboration.
- 9. **Training and Resources:** There was a call for providing adequate training and resources to users, ensuring they can effectively utilize the platform's features.
- 10. **Patient-Centric Approach:** A few responses emphasized the importance of keeping patient outcomes at the forefront, suggesting features that directly benefit patient care and treatment.

The feedback underscores the need for collaboration, user accessibility, and integration with existing systems, highlighting the platform's potential role as a unifying tool in the research community. Data privacy, security, and quality are again main concerns. Sustainability and regulatory guidance are seen as crucial for the platform's success, pointing towards the need for a well-planned and compliant operational framework.

## Conclusion

The Stakeholder Survey detailed in this report provides vital insights for the project and the Cancer Image Europe platform it is deploying.



The results indicate a strong inclination among medical and AI researchers to utilize the platform for research. Innovators and policymakers also show a notable interest, however this is based on a smaller sample size of responses.

The survey responses highlight several key areas: the perceived need for secure data sharing, and concurrent compliance with stringent data protection regulations. Concerns about data privacy and security are prominent in the responses, with various stakeholders calling for robust security measures to safeguard patient data. This aspect appears crucial in maintaining trust.

User-friendliness and accessibility of the platform emerge as significant factors. Stakeholders express the need for an interface that accommodates various use-cases.

The platform's main potential lies in fostering collaborative research, facilitating data exchange. Providing innovative tools for data analysis and processing is highlighted and requested.

The feedback collectively indicates a positive outlook on the platform's ability to transform cancer research and treatment. However, stakeholders correctly identify that this required balancing of technological innovation with ethical considerations, data security, and regulatory compliance.

The conclusion drawn from the survey is multidimensional, reflecting the complex nature of integrating Al into healthcare. It suggests the project's direction should focus not only on technological advancement but also on building a secure, user-centric, and ethically responsible platform that aligns with the diverse needs of its stakeholders.

The emphasis on collaboration is pivotal in ensuring the platform's long-term viability and effectiveness, particularly considering the key question assessing the stakeholders' willingness to pay for access to the platform or for certain features.

In summary, the results of the stakeholder survey show that many concepts and aspects of EUCAIM and the Cancer Image Europe platform are well-received, but that sustainbility planning is a key item that needs to be considered by the consortium moving forward.



# Survey template

# **EUCAIM Stakeholder Survey Questions**

Introduction placeholder - for context

## General information

1. Country

Dropdown list with countries

- 2. Profile
  - Researcher (medical, academic)
  - Researcher (artificial intelligence)
  - Health care professional (e.g. clinician)
  - Innovator or health technology developer (industry)
  - Policy-maker or regulator
  - Patient organisations or patient
  - Data Protection Officer
  - Other (please specify)

# Understanding and awareness

- 3. Have you heard of the EUCAIM project and the Cancer Image Europe platform before today?
  - Yes
  - No

# **Expectations and priorities**

- 4. Which aspect of the EUCAIM project and the Cancer Image Europe platform interest you?
  - Sharing cancer images
  - · Accessing cancer images for academic research
  - · Accessing cancer images for for-profit research and exploitation
  - Using analysis and processing capabilities
  - Establish a collaborative network with other researchers
- 5. In your view, what should be the primary goal of EUCAIM?
  - Enhancing cancer diagnosis accuracy
  - · Facilitating cross-border data sharing
  - Advancing AI research in healthcare
  - Other (please specify)
- 6. The EUCAIM platform will increase the overall quality of cancer treatment and care for patients across Europe.
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree



- 7. Do you think EUCAIM and the Cancer Image Europe platform can incorporate patient perspectives effectively in its research and development processes, considering the sensitive nature of cancer-related data?
  - Yes
  - No

## If yes, how:

Do you think EUCAIM and the Cancer Image Europe platform can foster collaboration between researchers, clinicians, and other stakeholders, including patients, to facilitate the development of more effective and personalized cancer treatment approaches?

- a) Yes
- b) No

If yes, please elaborate how:

# Data management and privacy

- 8. How important are data privacy and security measures in projects like EUCAIM to you?
  - Very important
  - Important
  - Moderately important
  - Slightly important
  - Not important
- 9. What are your main concerns regarding data privacy and security in the EUCAIM project?

Open question

# **Usability and Implementation**

10. What do you perceive as the biggest potential barriers to implementing EUCAIM's outcomes in the healthcare system?

Select 1-3 options

- Lack of awareness
- Lack of accessibility
- Lack of data
- Lack of tools and processing
- · Lack of technical training
- Resistance to new technologies
- Data privacy concerns
- Other (Please specify)

# **Engagement and Collaboration**

- 11. Would you consider using or contributing to the Cancer Image Europe platform?
  - Yes, as a data holder, providing access to cancer image data
  - Yes, as a researcher, using data and/or tools, processing
  - Yes, as an innovator, using data and/or tools, processing
  - Yes, as a data holder and data user
  - · Yes, in policy-making
  - No
  - Other (please specify)



#### If data user above:

- A. An infrastructure that enables secure access to cancer image data would be valuable to my organization
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree (please specify)
- B. The Cancer Image Europe platform will facilitate my organisation to have access to multicentric cancer image data
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree (please specify)
- C. The Cancer Image Europe platform will reduce the time (and associated costs) needed for my organisation to generate new multicentric data collections in response to a specific Research Question
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- D. Cancer Image Europe will provide my organisation with tools to facilitate data discovery and data access
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- E. Cancer Image Europe will provide my organisation with tools for distributed processing
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- F. The secure processing environment will facilitate and simplify my organisation's legal and ethical compliance in the use of cancer image data
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree



## If data holder above (researcher or innovator):

- A. An infrastructure that enables secure and controlled data sharing would be valuable to my organization
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- B. The Cancer Image Europe platform will make my organisations' datasets (more) FAIR (findable, accessible, interoperable and re-useable), through the mapping to a common hyperontology and the harmonization of multicentric imaging data. This attracts the interest of potential data users.
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- C. EUCAIM and Cancer Image Europe will facilitate that my organization achieves longterm sustainability for the data collections generated in the context of European or publicly funded research projects, after the project ends
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- D. Cancer Image Europe will facilitate that my organisation is better aligned with an institutional, regional or national positioning on contributing our health data for secondary use
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- E. EUCAIM will facilitate that my organisation complies with the future European Health Data Space (EHDS) regulation
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- F. Access to the infrastructure will promote participation of my organization in largescale, multicentric studies, contributing to my organisation's recognition and collaboration opportunities
  - Strongly agree
  - Agree
  - Neutral
  - Disagree
  - Strongly disagree
- 12. Are you interested in participating in future EUCAIM workshops or training sessions?



- Yes
- No

Follow-up: if yes above, ask for contact details

# Sustainability

- 13. Would you or your organization be willing to pay for access to advanced features or services provided by the EUCAIM platform?
  - Definitely yes
  - Probably yes
  - Maybe
  - Probably not
  - Definitely not

# Incentives for Contribution

- 14. What incentives would most encourage you to contribute data or tools to the EUCAIM platform?
  - Financial compensation
  - Access to exclusive research and tools
  - Recognition and citations
  - Regulatory support
  - Making my datasets more compliant with international Common Data Frameworks.
  - New opportunities for collaborations
  - Partners in projects that are/will be funded
  - Other (please specify)

# **Future Direction**

15. What additional areas or features would you like to see included in the EUCAIM project?

Open question

# **Final Thoughts**

16. Please feel free to share any other thoughts, feedback or suggestions about the EUCAIM project and the Cancer Image Europe platform

Open question