

Project No. **101045956****Biomarker and AI-supported FX06 therapy to prevent
progression from mild and moderate to severe stages of COVID-19**

Deliverable 8.5

Interim impact report

WP8 – Communication, dissemination & exploitation

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Partner short names

GUF	Johann Wolfgang Goethe Universität Frankfurt am Main
accelCH	acceloment Schweiz AG
ESAIC	European Society of Anaesthesiology and Intensive Care
Fraunhofer	Fraunhofer Institute for Translational Medicine and Pharmacology ITMP
F4	F4 Pharma GmbH
TAU	Tampereen Korkeakoulusaatio SR
UCD	University College Dublin
UMCG	Universitair Medisch Centrum Groningen
MiDA	Medical Intelligent Data Analytics GmbH
UHW	University Hospital Würzburg
UNIPG	Universita degli Studi di Perugia
KC	Lietuvos Sveikatos Mokslu Universiteto Ligonine Kauno Klinikos
ICS-HUB	Hospital Universitari de Bellvitge
UMFCD	Universitatea de Medicina si Farmacie Carol Davila din Bucuresti
CHUC	Centro Hospitalar e Universitario de Coimbra E.P.E.
APHP	Assistance Publique – Hôpitaux de Paris
MUMC	Maastricht University Medical Center+

Abbreviations

D	Deliverable
DCP	Plan for dissemination including communication activities
EC	European Commission
EMA	European Medicines Agency
EU	European Union
HEU	Horizon Europe
M	Month
WHO	World Health Organisation
KPI	Key Performance Indicator

Executive Summary

The present document represents Deliverable 8.5 – Interim impact report - and has been developed as part of WP8 – Communication, dissemination & exploitation. The main goal of this deliverable is to present an evaluation of the communication and dissemination activities implemented during the first 24 months of the project and their impact towards reaching scientific, economic and societal goals. While the Plan for dissemination including communication activities (DCP – D8.3) defines the activities planned for the entire project duration, not everything is foreseeable and adjustments have to be made. Thus, an evaluation of the activities implemented thus far is necessary to ensure that the strategy of the COVend project for maximising the impact and contribution to societal and economic goals through the development of the therapeutic candidate FX06 for COVID-19 treatment, as well as the DCP remains effective and efficient. In addition, the results of this assessment are critical for recognising that the implemented activities and the approaches employed are ensuring that all stakeholders, including patients, healthcare professionals, hospitals, pharmaceutical companies, and the healthcare industry in general, can potentially benefit from the results of the COVend project.

To assess the effectiveness and determine the overall current impact, the evaluation was mainly conducted using the methods of performance data collection and analysis, in particular towards set key performance indicators (KPIs). Key outcomes of this assessment include the effectiveness and impact of the implemented activities and created materials, the cross-channel communication through the project's social media accounts and project website, as well as the stakeholder reach.

Key communication&dissemination performance outcomes include:

- Key stakeholders reached (healthcare professionals, hospitals, researchers, clinicians)
- Website gaining consistent and growing interest with current 2,179 page views, 6,158 clicks and 858 sessions.
- Social media presence successfully built, reaching 184 followers (LinkedIn: 150; Twitter: 34)
- Press release gathered 19 downloads from the website.
- Factsheet gathered 14 overall downloads from the website.
- Posters targeted for the project's showcase viewed by more than 8,000 attendees at several events.
- Project video gathered more than 400 views on the project's social media channels.
- Two specially tailored infographics viewed by 60 attendees at the ENVISION – Highway to Health Final Event
- Three peer-reviewed publications available with more than 2,000 overall views
- A successfully implemented joint COVend and ENVISION Cluster & Policy Event gathered 51 attendees (policymakers, EC representatives, EU-funded cluster projects coordinators, researchers, clinicians, etc.)
- 10 conference participations, interviews where the project was showcased reaching about 9,000 different stakeholders.

In conclusion, it can be said that halfway to its end, the COVend project is well on track to achieving its goals. The results of the evaluation indicate that the project has started having a significant impact on science, economy and society. Its communication and dissemination strategies have allowed a wide



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range of stakeholders to become aware of the project, its research activities and current research results, leading to the potential benefit of FX06 in preventing severe illness and hospitalisation of patients suffering from moderate COVID-19 cases. The project also raised awareness of capillary leak and its related economic consequences, highlighting the need for extensive clinical and theoretical research into the issue. Important advances have been made in data management, providing a framework for efficient and effective data management in clinical research. Ultimately, the project's communication and dissemination efforts have been successful in increasing knowledge about COVID-19 and the potential for the FX06 therapy, which is likely to have an immense impact on the preparedness level for potential pandemics.

Overall, timely contributions from all partners to the activities are crucial to continue creating worthy impact and remain a priority in the implementation of upcoming activities.

Related deliverables:

- D8.1 COVend website
- D8.3 Plan for dissemination including communication activities

1 Introduction

The COVID-19 pandemic has been a global health crisis that has caused much disruption to the lives of people around the world. However, the number of cases is decreasing, hence the number of patients available for recruitment to clinical trials has also reduced significantly. According to the World Health Organisation (WHO), globally, the number of new COVID-19 cases and deaths has continued to decline since the end of March 2022.¹ As the IXION clinical trial is at the heart of the work in COVend, to deliver FX06 as a viable therapy against COVID-19, the COVend project and especially the patient recruitment process have been hampered strongly by this fact. The lack of patients has been a major blow to the COVend research as the shortage of patients has delayed the trial's progress, resulting in the lack of data to evaluate the safety and efficacy of the FX06 therapy properly. This has led to temporary delays in the delivery of some of the project's results and activities.

Despite the above-described circumstances, the COVend consortium is committed to continuing the efforts to pursue the best outcome from the IXION study and the dissemination measures of the project already count three peer-reviewed publications, ten conference presentations and a successful organisation of the Joint Cluster and Policy Event. Once the initial results of the IXION study are available, the COVend project will also disseminate them through other planned dissemination activities, such as collaboration with clinical trial networks, European Medicines Agency (EMA) workshops, Science Day, etc.

While in the DCP we presented the key components of the dissemination and communication strategy, such as target audiences, messages, channels and tools, as well as measures to evaluate the implemented activities, herein we start from the evaluation indicators defined in the DCP to assess the effectiveness of the implemented activities during the COVend project's first two years. Based on this assessment, suggestions for improvement and adaptation are made and envisioned to be implemented in both the ongoing and planned activities to maximize project's impact.

The Key Impact Pathways (KIPs) are an essential part of Horizon Europe to assess and communicate the programme's progress, allowing policymakers and the wider public to gain insights into the effects and benefits of Horizon Europe on European science, the economy and society. COVend has already some achievements within the defined KIPs (Figure 1), which include:

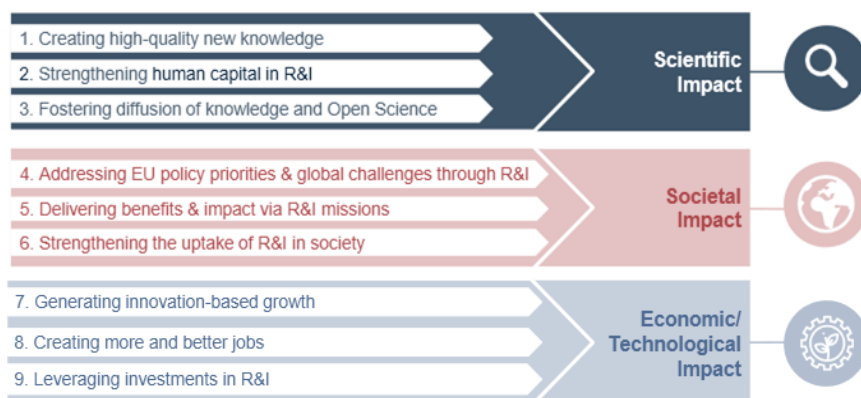


Figure 1. The 9 Key Impact Pathways (KIPs)

Scientific impact: The COVend project is contributing considerably to research on endothelial cells, particularly to the influence of COVID-19-triggered cytokines on the viability and activation status of

¹ World Health Organisation, COVID-19 Weekly Epidemiological Update, Edition 91, 11 May 2022



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pulmonary cells, as well as to biomarker research in terms of immuno-biomarker profiling and data analytics and modelling. The project is in the process of identifying novel biomarkers characterised to COVID-19 and contributing to the COVID-19 data portal by providing rich omics data sets. Three project's peer-reviewed publications are contributing to research on SARS-COV-2.

Societal impact: COVend addresses one of the biggest global challenges and health threats. COVend has the potential to prevent severe courses of illness and thereby decrease the mortality rate significantly. Positive clinical results with FX06 are expected to have an impact going even beyond COVID-19. Capillary leak and/or a hyperinflammatory state are common problems physicians are facing in different hospital settings, including Intensive Care. FX06 is targeting a central mechanism of endothelial dysfunction encompassing the final route of different (patho-)physiological pathways on the cellular level. Therefore, the consortium has already delivered solid proofs of a very broad applicability of FX06 in different disease areas.

Economic/Technological impact: The COVend project and F4 are working on making the drug affordable to healthcare systems worldwide. FX06 is a 28-amino-acid peptide with a validated manufacturing process and moderate production costs. The project contributes to new clinical standards in treating COVID-19, as well as to a health-economic model.

Further, in section 4 Impact assessment, we evaluate the project's impact referring to the unique COVend impact identifiers.

2 Objectives

The overall aim of reporting and evaluating the dissemination and communication activities of COVend is to keep improving the effectiveness of the DCP and maximise the project's reach and impact. With the help of this deliverable, the COVend partners aim to:

- report on the dissemination and communication activities implemented during the first 24 months of the project;
- present an assessment of the implemented activities based on the metrics defined in the DCP;
- based on the conducted communication and dissemination activities assessment, present the progress of the project's impact with reference to the defined project's KPIs.
- provide an outlook with suggestions for improvement and adaptation of activities, where needed.

This cycle of implementation, feedback, evaluation and adaptation is key to taking advantage of learning effects within the project.

3 Activities and impact assessment

The dissemination and communication activities planned in COVend are crucial to raise awareness about the project and to achieve a wide outreach of its results among the scientific community, clinicians and healthcare experts, patients, policymakers, potential new collaborators and society as a whole. In this section, we assess the project's varied range of communication activities first (Section 3.1), followed by the dissemination activities (Section 3.2). Those activities implemented to date are

covered below, whereas those that have yet to start will be described in the next periodic and final reports.

Communication activities



Cross-media communication and outreach to raise awareness (Task 8.1)

- ✓ Raise awareness of the COVend project, its consortium & activities
- ✓ Facilitate outreach & engagement of key stakeholders & potential contributors to the project
- ✓ Inform about and support the communication of the project in the clinical sites
- ✓ Facilitate dissemination activities

Dissemination activities



Disseminate the scientific and technological results (Task 8.2)

- ✓ Share scientific & technological knowledge, data & results with the healthcare & scientific communities to facilitate future and related research
- ✓ Disseminate relevant results to the general public & policymakers
- ✓ Promote and facilitate the uptake of FX06

3.1 Communication

The concepts of communication are defined below, as understood in the context of this project and in line with the European Commission's definition of these terms.

Communication focuses on taking strategic and targeted measures for promoting the action itself and its results to a multitude of audiences, including the media and the public, and possibly engaging in a two-way exchange. The main aims of communication are:

- To reach out to society as a whole and in particular to some specific audiences.
- To demonstrate how EU funding contributes to tackling societal challenges.

3.1.1 Plan for dissemination including communication activities

All planned communication and dissemination activities were comprehensively described in the DCP, submitted as D8.3 in January 2022. The DCP provides a clear strategy for communication and dissemination of the project and its results, defining its target groups (Figure 2), key messages, tools and channels, planned activities (Figure 3), partner responsibilities and targets set to guide the impact assessment throughout the project.

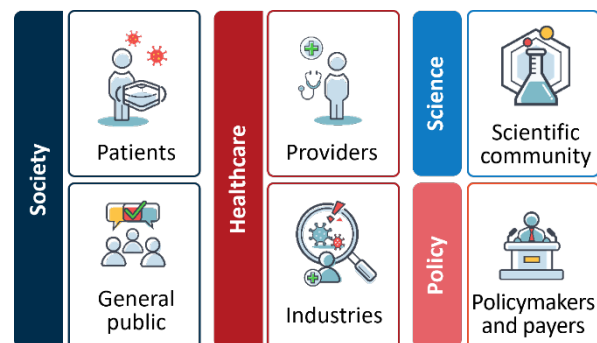


Figure 2. COVend target groups and specified interest groups

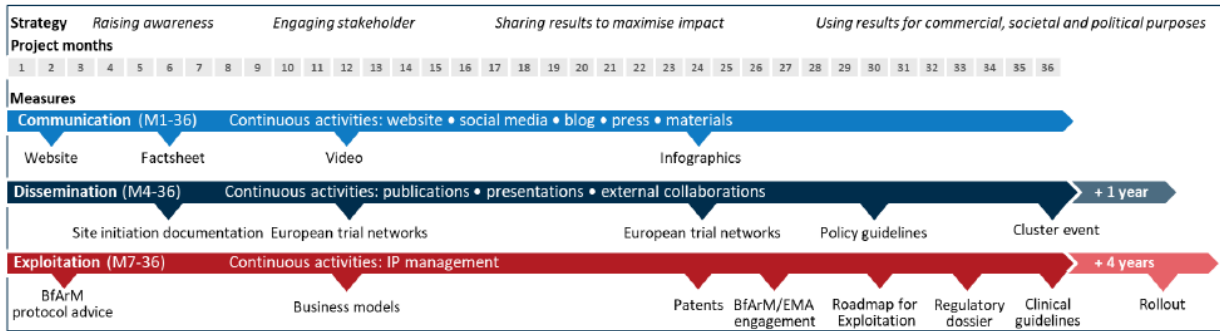


Figure 3. COVend planned and partially implemented activities timeline

COVend makes use of a variety of tools and channels to communicate and disseminate its key messages and project results to its targeted stakeholder groups.



Tools

- ✓ Project identity design material
- ✓ Content material
- ✓ Print material
- ✓ Audio-visual material



Channels

- ✓ Direct channel
 - Face-to-face
 - Face-to-audience
- ✓ Indirect channels
 - Print media
 - Display media
 - Online media

3.1.2 Project website

KPIs metrics (DoA): number of clicks, duration of stay
Target: 250 visits per month

The COVend website (<https://covend-project.eu/>) was launched in August 2021 and serves as the main source of information for all stakeholders, providing them with a comprehensive overview, as well as detailed progress on the project objectives, activities and results. The information displayed on the website is continuously updated and expanded to complement the given content with new findings and results. The website is securely hosted and maintained on the webserver of accelCH. It was created by accelCH using the online website design tool [WordPress](#) and combines input and content provided by all partners. The rationale for its structure, as well as its planned use and implementation, were documented in deliverable D8.1.

The website was set up with pages tailored to different target groups, identified in the DCP, including such pages as "[Project](#)", "[Research & Innovation](#)", "[Clinical trial](#)", "[Partners](#)", "[News](#)", "[Information](#)" and a [Home page](#).

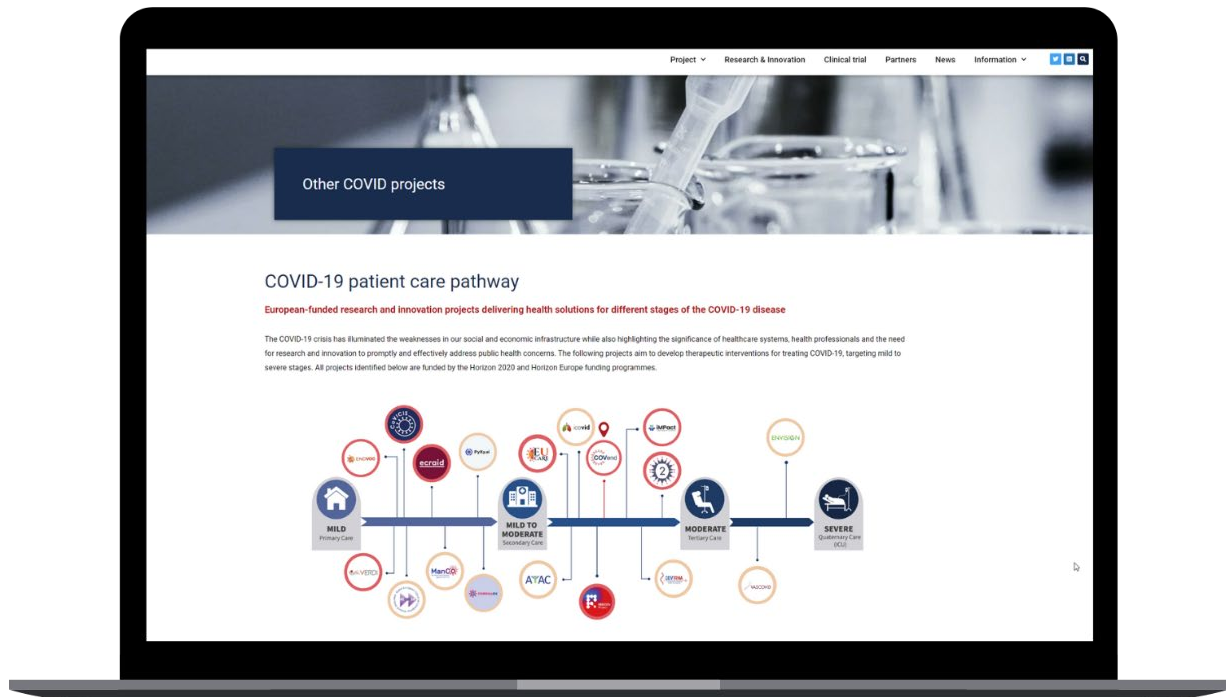


Figure 4. COVend website page "Other COVID projects" depicting an interactive patient care path infographic

accelCH regularly reviews the website to update it with new communication material developed for the project, or as new results and output become available to share from the partners. Since the submission of D8.3, the website has been enriched with new content:

- 1) The subpage "COVID-19" was edited and transformed to a "[COVID-19 Monthly Tracker](#)" subpage which offers monthly updated data tracking tool of the COVID-19 virus progression in Europe since the onset of the pandemic, providing statistics of total cases, new cases, hospitalised patients, and Intensive Care Unit (ICU) patients for a current month as well as the graphs representing the data for the mentioned values for the period of the last 12 months from the mentioned month.
- 2) The subpage "[Other COVID projects](#)" (Figure 4) now contains the interactive map which depicts a COVID-19 patient care pathway and some of the EU-funded projects delivering health solutions for different stages of the COVID-19 disease. The identified projects are funded by the Horizon 2020 and Horizon Europe programs and aim to develop therapeutic interventions for treating COVID-19, targeting mild to severe stages. Each icon with a project's logo is clickable and linked to a specific EU project. A toggle section below the interactive map also provides a short description of the mentioned projects. This page is an excellent opportunity to give stakeholders a bigger picture of the COVend cluster projects.
- 3) The subpage "[Literature](#)" is constantly updated and lists all project-related publications.
- 4) The subpage "News" is constantly updated with recent project-related news and contains multimedia files, such as photos and files available for download.

Assessment

The performance and reach of the website are monitored via Google Analytics. Since the website was launched in August 2021, the first month for which comprehensive data is available is September 2021 (M2). The key Users and Page Views metrics are reported at quarterly intervals. Still making its way to the targeted 200 visits per month, over the project’s first two years, the website has gained continuous and growing interest, gathering a total of 505 users (Figure 7), 2,179 page views, 6,158 clicks and 858 sessions (Figure 6). The average engagement time per session is 52 seconds (Figure 8), with an engagement rate of 56.18%. During the 24 months

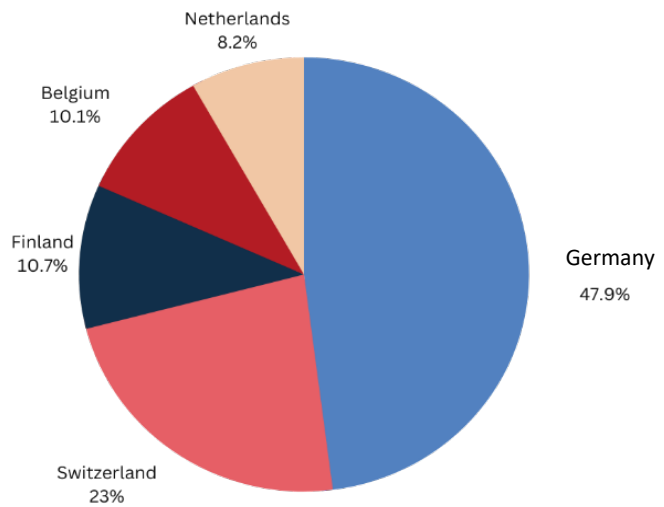


Figure 5. The percentage of users visiting the COVend website from the indicated countries

considered, the users visiting the website were from a total of 51 different countries (Figure 5), but primarily from Germany (47.9%), Switzerland (23%), Finland (10.7%), Belgium (10.1%) and the Netherlands (8.2%), showing an interest in users from the partners’ countries.

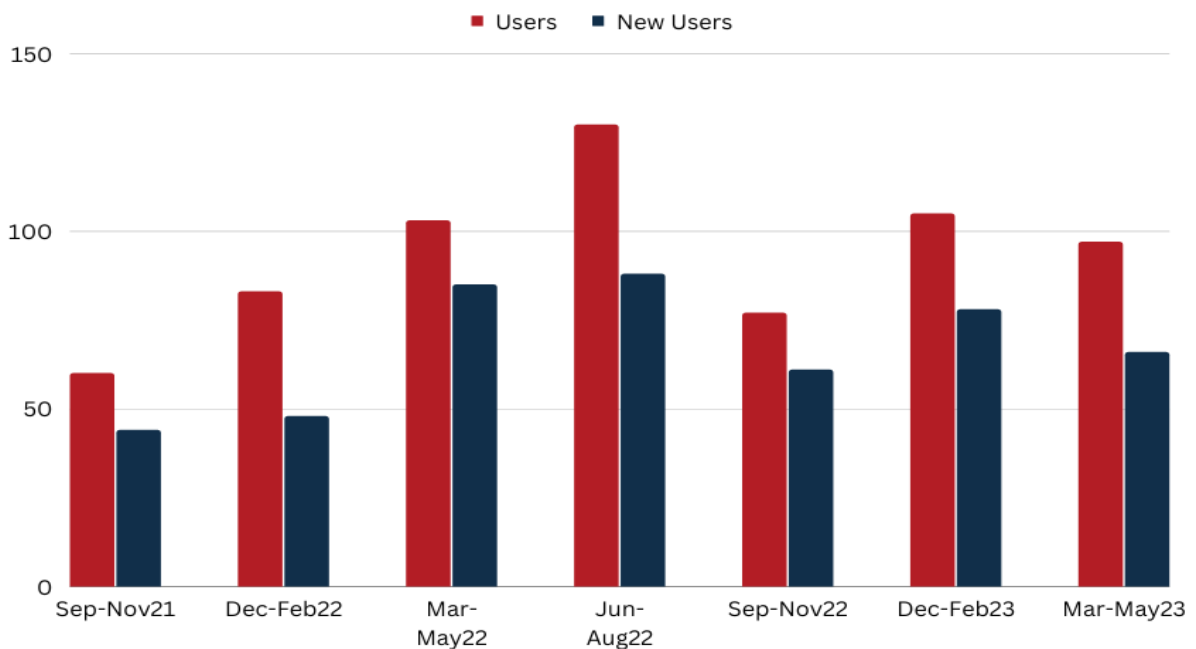


Figure 6. Users/New Users metrics from Google Analytics for the COVend website during the period of M2-M22 reported quarterly

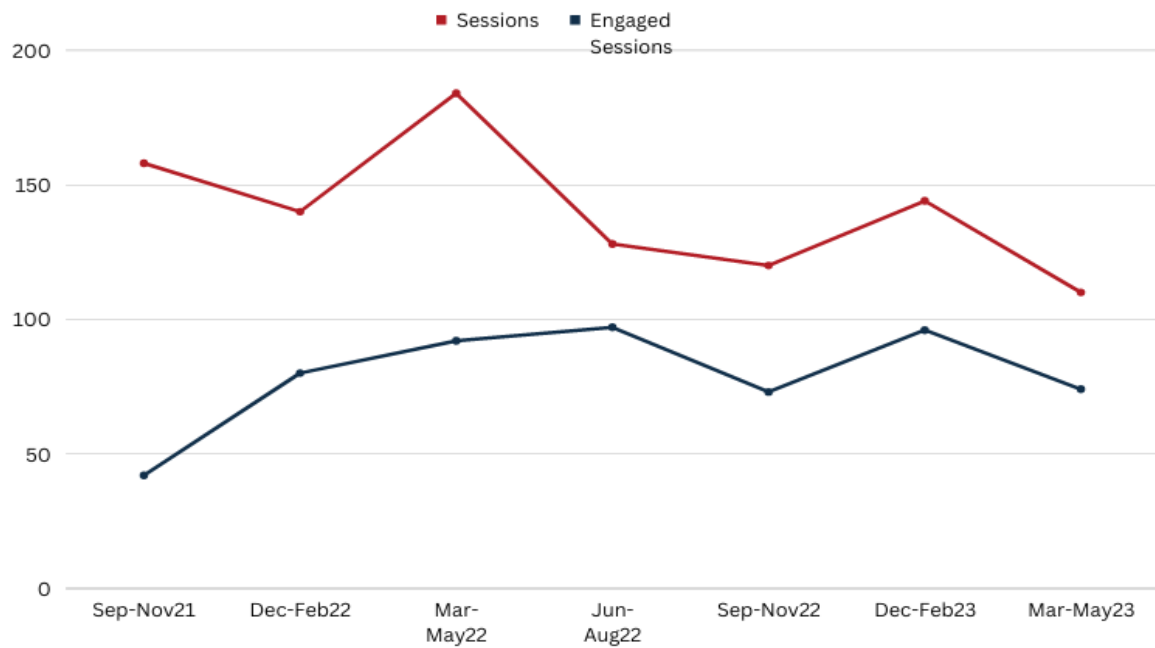


Figure 8. Sessions/Engaged Sessions metrics from Google Analytics for the COVend website during the period of M2-M22 reported quarterly

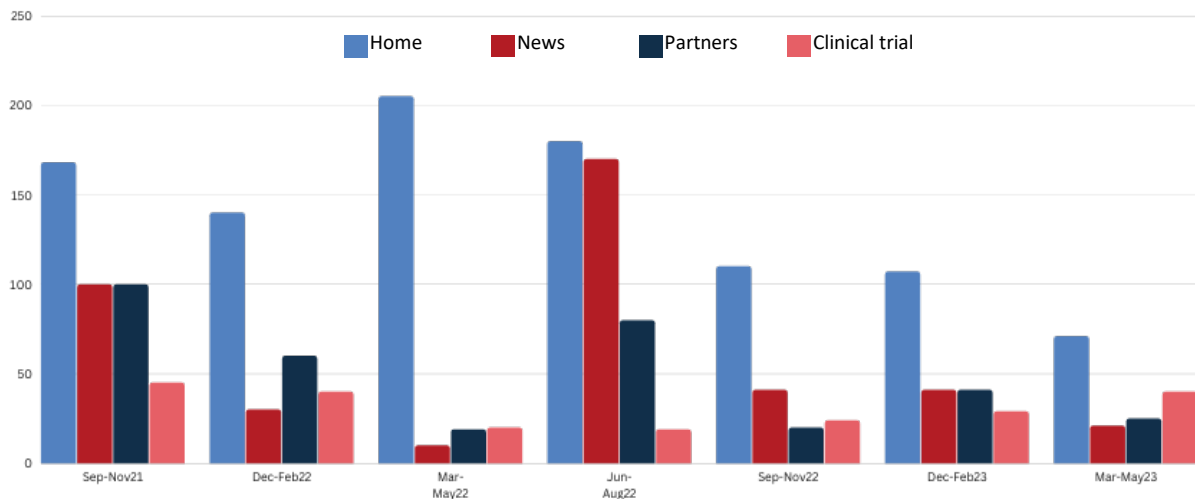


Figure 7. Page Views metrics from Google Analytics for the COVend website during the period of M2-M22 reported quarterly (top 4 pages selected)

A peak of users, page views and sessions are observed during the quarter of M12 – M14 (Figure 8). This coincides with when COVend was represented at the Euroanaesthesia Congress 2022. Aside from the homepage at that period, the top pages viewed overall are the Partners page and the News page

suggesting an interest in the team behind the project and the progress communicated with news from the partners. It is also positive to observe that newly added content draws visitors: for instance, the other COVID projects page became the third-most viewed when an interactive tool was added in February 2023. The same happened to the COVID-19 monthly tracker page when the first data on February COVID-19 trends was published in March 2023. This shows that promotion measures such as the implementation of interactive tools and regularly updated project-related content have been successful and that the audience is interested in the shared content.



Figure 9. The average engagement time per session on the COVend website

According to the European Commission' guidelines, making the EU-funded project visible is crucial to reach out to relevant stakeholders and build new collaborations. It is also a legal obligation under the grant agreement. Most EU-funded projects are required to have a web presence.

Keeping the COVend website up-to-date is extremely important as it provides target stakeholders, potential collaborators and the general public with relevant information about the project and its progress. The website acts as a resource hub, making information on the project's objectives, actions and results easily accessible to anyone interested, increasing visibility for the project and awareness of the FX06 therapy and COVID-19 disease in general. This allows the project to reach its Key Impact Pathways and ultimately contribute to its scientific, economic and societal impact.

Promotion measures such as the implementation of interactive tools and regularly updated project-related content have been successful so far. This can be seen by the grow of users, page views and sessions, alongside increased engagement time per session and an overall high engagement rate. Most users are from the project's partners' countries, however users from a total of 51 different countries have shown an interest in the project.

3.1.3 Social media

KPIs (DoA): number of retweets, likes, views, shares, followers

Target: 100 followers by M24

The COVend project uses the most popular social networks, such as [Twitter](#) and [LinkedIn](#), which are easily accessed by common search engines or through the project website. These social media accounts are mainly managed by GUF with the support from acchelCH and input from all partners. All social media accounts help improve the visibility of regular news updates published on the project website. A project video highlighting key project's facts and was created and used as an introductory post on both social media channels.

Assessment

The main social media presence target, as defined in the DCP, was to reach a total of 100 followers by M24, which was successfully achieved in November 2022. As of July 2023, the project has gathered 184 followers (LinkedIn: 150; Twitter: 34). We focus herein with reporting the key metrics tracked using the analytics features available on the respective platforms. As shown in, both Twitter and LinkedIn followers engage with the project's content mostly by liking posts, followed by a lower share of link clicks, comments and reposts/retweets (Figure 10). This type of engagement is encouraging, suggesting that the content shared is of interest to the followers.

The highest engagement is seen on social network, such as LinkedIn which is represented by 736 page views, 749 reactions and overall 22,626 impressions.

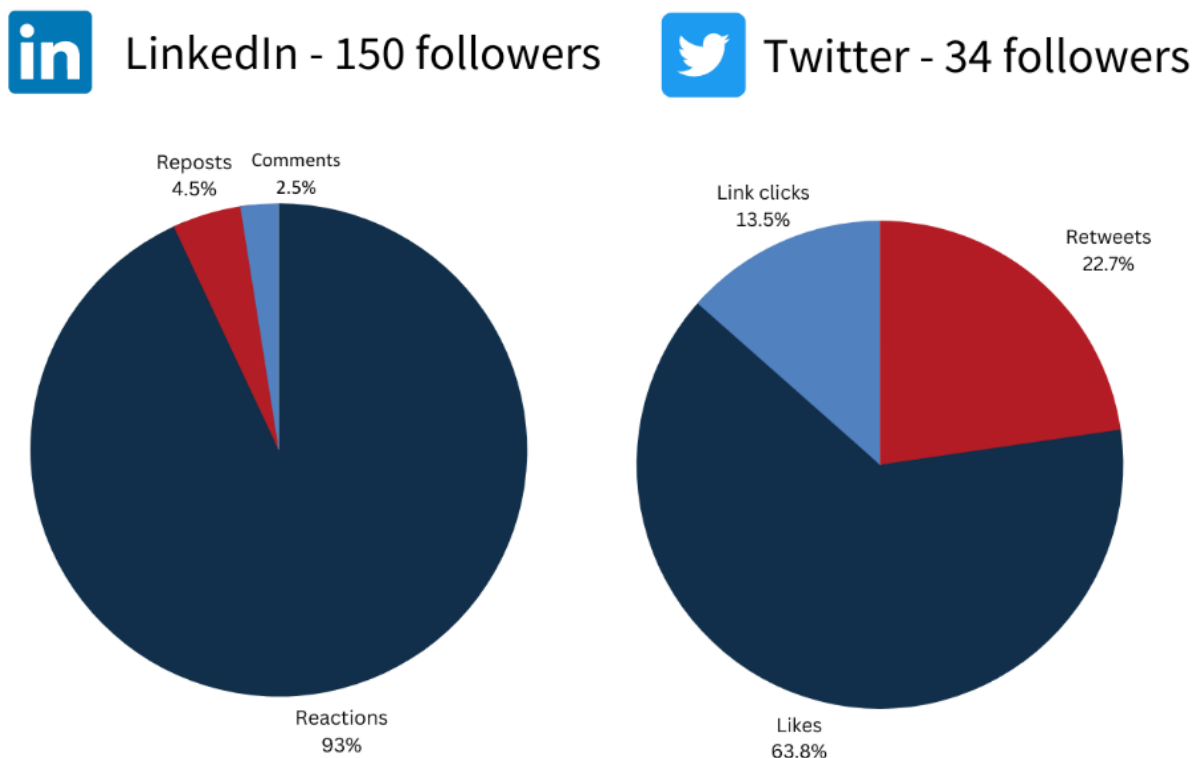


Figure 10. Followers and type of engagement for the COVend LinkedIn (left) and Twitter (right) social media channels

In conclusion, the COVend communication team has successfully used social media to raise awareness of the project and its IXION study in order to support patient recruitment. Through tailored campaigns and increased visibility, the project has managed to build a strong network. Despite the difficulty in reaching a high number of likes per post and an increased engagement rate, the project has seen a rising number of followers. Through strategic planning, targeted campaigns and increasing visibility, the project has achieved its original KPIs and succeeded in gaining attention from the public. Going forward, the COVend communication team will continue using established communication approaches and implementing planned activities to further strengthen the project's reach and engagement across its social media channels and contribute to the patient recruitment process for the IXION clinical study.

3.1.4 Press release

KPIs (DoA): number of downloads

Target: 30 downloads

A first press release announcing the start of the COVend project was created in occasion of its kick-off meeting and published with the title «[The EU invests in a promising new COVID-19 therapy](#)» on the project's website as well as the project's partner F4's website. The press release was written by accelCH and distributed to all partners to disseminate using their own channels. The press release was structured in a way that allowed each partner to further adapt the press release for their organisations' contribution to the project.

Assessment

Due to data protection regulations, we do not have access to the views generated by the press release on external platforms, but through the News page on the COVend website, this first press release gathered 19 downloads. While not many, the low number of downloads is also to be considered bearing in mind that the website was at its very first stages at this point and the project was at its infancy, without an established community of interested stakeholders. From other experiences, however, the press release could have had more outreach had it been shared further by the partners through their organisations' well-established channels and media connections; a point that will be more emphasised for future press releases.

3.1.5 Factsheet

KPIs (DoA): number of downloads, printed versions distributed

Target: 100 downloads, 50 distributed at the events

A general project factsheet (Figure 11) was created at the start of the project to inform the public and different stakeholders about key project information. The factsheet



Figure 11. COVend factsheet

includes the following: Background information, Project goals, FX06 therapy operation, Impact and Information about the Consortium.

Assessment

The German and English versions of the factsheet are available for download at the project’s website, currently having gathered 14 overall downloads. In order to improve the outreach for the following created material, it is planned to restructure the project’s website, creating a dedicated page that will contain an outreach kit – all the COVend materials available for download, including the COVend factsheet. It is expected that this approach will increase the visibility of the materials, thus increasing the number of views, downloads and overall reach.

3.1.6 Posters

KPIs (DoA): number of downloads, printed versions distributed
Target: 30 downloads

A promotional and scientific posters were created in October 2021 to visualise the key objectives and the specifics of the IXION clinical study and as well as the details on the FX06 therapy, and the benefits that the project will bring. The language and content presented on the poster are easily comprehensible for a non-expert audience and include general information about the technologies and scientific approaches used in the project, redirecting to the project’s website and social media channels for more information. The posters were created with the intention of those being displayed at the partners’ facilities, in clinics, hospital hallways and similar high-traffic environments relevant to the project’s patient recruitment process, with a PDF version available for download by all partners on accelCLOUD. A round of significant updates and improvements for the scientific poster (Figure 12) was implemented in February 2023 that enabled a broader showcase of the COVend project at Euroanaesthesia Congress 2023, providing more details on the scientific achievements of the project,

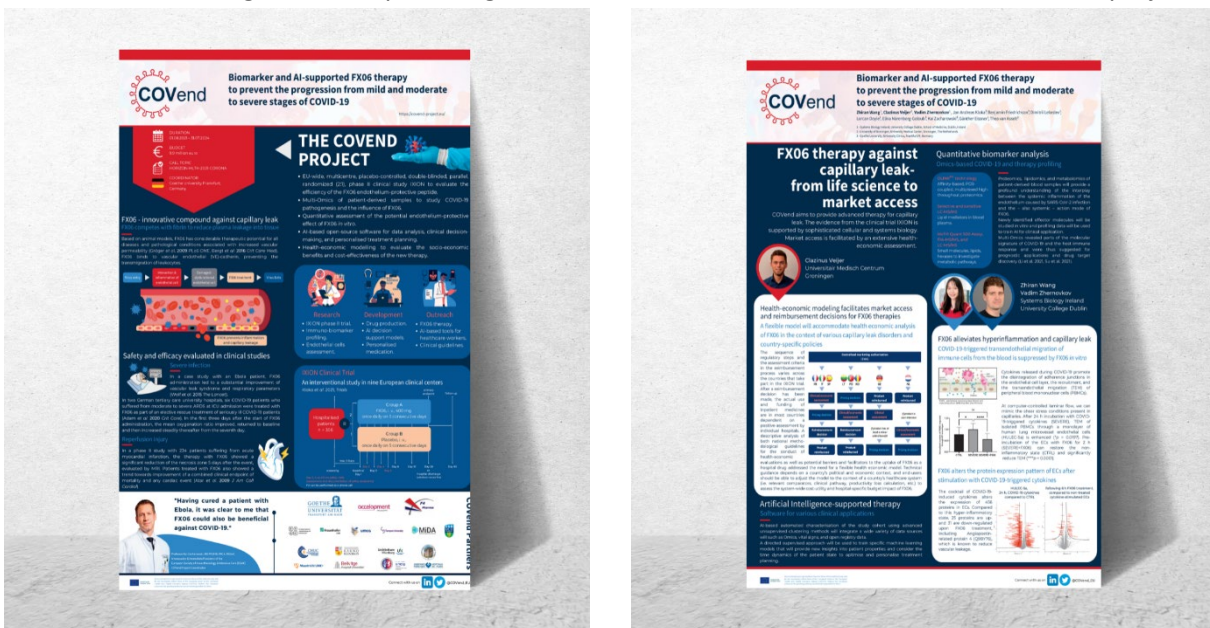


Figure 12. The updated COVend scientific poster (two sides)

namely health economic modelling for FX06 therapy (UMCG), FX06 alleviation of hyperinflammation and capillary leak (UCD).

Assessment

As the posters haven't been included on the project's website and thus haven't been available for download, we consider the number of direct distributions and showcases of the material the key metrics. The posters are permanently used for the project showcase at various events, such as

- Military Health System Research Symposium, represented by Petra Wüllfroth, F4: audience reached – 200 people (research community, international organisations, businesses and industries, national authorities);
- Euroanaesthesia Congress 2022, represented by K. Zacharowski, J. Kloka, B. Friedrichson (GUF) and hosted by the partners from ESAIC: audience reached – 3900 people (research community, industries and businesses)
- Euroanaesthesia Congress 2023 represented by K. Zacharowski, B. Friedrichson hosted by the partners from ESAIC: audience reached –
- Highway to Health: ENVISION Final Event: audience reached – 60 (research community and clinicians)
- Cluster & Policy Event Highway to Health – Future of Healthcare in Europe: audience reached - 50 (European Commission representatives, policymakers, politicians, research community, cluster projects representatives, clinicians)

Overall, we consider to be on track to reach the targeted downloads of the poster by the end of the project, once a dedicated website page with all created communication materials mentioned above is set up, making both posters available for download.

3.1.7 Infographics

KPIs (DoA): number of downloads/print versions distributed

Target: 30 downloads

Two specially tailored infographics for the ENVISION – Highway to Health Final Event were created in the format of posters. These posters were exhibited during the event in January to inform the invited research community and representatives of the projects funded under the same call. The first infographics, titled "Patient Care Pathway", depicted the projects funded under Horizon Europe that are working to develop therapeutic interventions for treating COVID-19, targeting mild to severe stages. The ENVISION event offered a great chance to provide a general overview of the ongoing projects that deliver health solutions for different stages of COVID-19, since several representatives of those projects were invited to the event. Later this infographic was used to implement an interactive tool on the project's website page "Other COVID projects". The second infographic summarised the outcomes of the COVID-19 pandemic in Europe in 2022, represented in the form of graphs of the overall tendencies of total COVID-19 cases, hospitalised patients, and ICU patients. These posters will be further used during meetings and conferences to showcase the COVend project.

Assessment

As there were printed versions of the infographics used at the event, we consider the number of reached audience as a key metric for the posters. The event was attended by 60 people in total, gathering research community and clinicians. As for the first infographic that is mainly used as a website digital tool now, the key metric is the number of “Other COVID projects” page views. The total number of views for this page since its publication in February 2023 is 70 views, which is expected to grow after launching a specifically tailored social media campaign on highlighting the cluster projects and their impact.

3.1.8 Explainer video

KPIs (DoA): number of views

Target: 80 views

A [project video](#) (Figure 13) highlighting the objectives and the expected outcomes of COVend and featuring key facts about it (partners, clinical trial, etc.) was created and shared on the COVend social media channels to reach key stakeholder groups.

A [FX06 explanatory video](#) on the background and function of FX06 was created and successfully distributed through COVend social media channels. The aim of project’s explanatory video was to explain the key objectives of the project through a combination of general terms and technical lingo, to create engaging audio-visual presentations of COVend and its objectives.

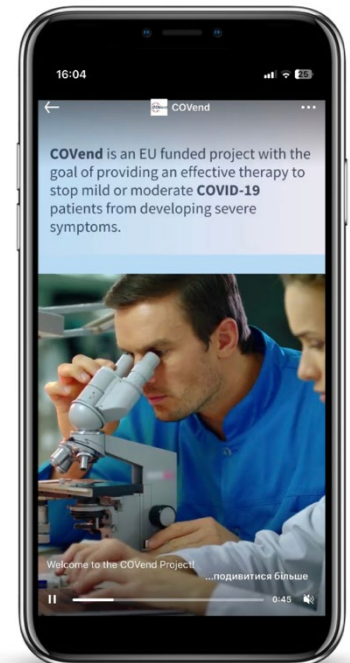


Figure 13. COVend explanatory video

Assessment

The total reach for the explanatory video from both LinkedIn and Twitter platforms is 136 views, 992 impressions and 28 clicks; for the project video it accounts for 285 views, 574 impressions and 17 clicks. As the videos were created and intended to be used as part of social media activities, the total outreach on those platforms is considered good. However, the FX06 explanatory video is planned to be added to the project’s website page “Clinical trial” after the planned material revision and update of the website, increasing the visibility and the overall outreach of these created materials.

The COVend videos are an excellent tool for helping the project reach its set KPIs. Creating engaging videos that feature the project and its progress, helps to generate awareness of COVend, foster understanding of the project's purpose, and promote the initiatives in the broader public sphere. Furthermore, social media channels serve to extend the reach of the videos further, providing an opportunity to engage with members of the public and to hone the messaging of the project’s progress effectively. This not only enables the project to report more widely on its work but creates the potential for more individuals to be actively engaged in the project and its activities. As a result, the videos created by the COVend project can be considered an invaluable tool in contributing to the project's KIPs.

3.1.9 Newsletter

KPIs (DoA): number of downloads

Target: 100 subscribers

The annual internal newsletters were created and distributed to the consortium partners at the end of 2021 and 2022. The newsletters contain highlights of the past year and an outlook ahead to the following year. The newsletters summarise the project’s accomplishments, emphasising the partners’ contributions during a specific project year. It is planned to continue distributing such internal newsletters for the partners for the upcoming project years.

Apart from the internal newsletter, the partners from ESAIC and Fraunhofer prepared an e-newsletter (Figure 14) with a focus on the IXION Clinical partners to give them simultaneously an update on the current start-up status at the different sites and FX06 therapy development, highlight some critical Q&A in order to stimulate the patient recruitment for the IXION clinical study. It is planned to expand the reach of the next newsletters by translating them into the local languages of the partners’ clinical sites, not just English.

Assessment

The total reach of the annual project progress newsletter sent out to the whole consortium is 60 recipients. The IXION clinical trial newsletter was addressed and successfully distributed to the COVend clinical partners reaching 46 clinical partners in total. At this point we consider this to be an excellent approach for facilitating the patient recruitment at the clinical sites which is planned to be even more effective after a round of identified improvements.

3.1.10 COVend roll-up

The project roll-up (Figure 15) highlighting key information about the project and depicting all project partners was created in April 2023 and first used at the COVend 5th Steering Committee meeting. Considered as a good promotional material, it was later used at the joint Cluster & Policy Event in July. The roll-up also contains a QR-code directing to the project’s website and is planned to be used for project promotion at other upcoming events.

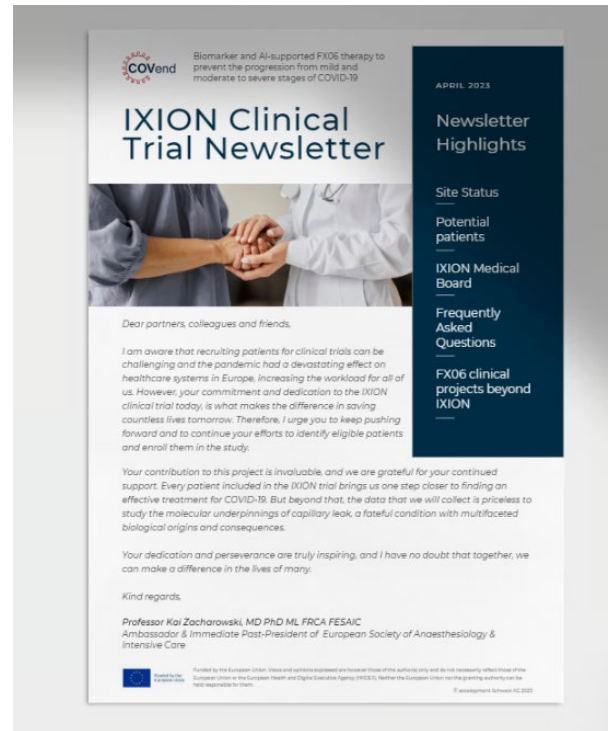


Figure 14. IXION clinical trial newsletter



Figure 15. COVend roll-up

Assessment

The total reach for the roll-up is considered the number of potential views by the attendees of the events it was presented at. For both events, it accounts for more than 100 views.

It is also important to mention that all created COVend materials are available in PDF format on a shared workspace accelCLOUD, for the partners' use and distribution.

3.1.11 The overall impact of the created communication materials

Considering the quantitative indicators of the created communication materials in the course of this evaluation, it is evident that the COVend project has gained increased visibility through the successful dissemination of those. Contributing to the portfolio of COVID-19 therapeutics and to new effective strategies for the clinical management of COVID-19 disease, including the prevention of disease progression to severe illness and hospitalisation, various stakeholders are already starting to benefit from the available scientific results of COVend.

Specifically, the primary impact of the project is on patients with moderate COVID-19 disease, which called for specialised strategies for the promotion of the novel drug - FX06 therapy and its benefits. Even though the patient recruitment process has been delayed, leading to a significant influence on the overall progress of the project and its IXION clinical trial, COVend has worked diligently to promote the clinical study and facilitate patient recruitment at the clinical sites with the help of tailored communication materials and the defined techniques and approaches for their dissemination.

The implemented cross-media communication and outreach has been successful in raising awareness of the COVend project, its consortium and activities, which will enable the continued scientific impact of the project, including further biomarker and health technology research. Additionally, the engagement of key stakeholders has helped to cultivate a strong network that will facilitate further outreach of the socioeconomic impact of the therapy, which could ultimately become a standard clinical practice.

The evaluation of the conducted activities is reflective of COVend's commitment to maximising the impact and exploitation of its outcomes through effective strategies, active stakeholder engagement and a cross-channel and multimedia approach to facilitation of the dissemination activities.

3.2 Dissemination

Dissemination is defined as the public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium. It aims to:

- Transfer results to the stakeholders that can best make use of them.
- Maximise the impact of research, enabling the value of results to be potentially wider than the original focus.

3.2.1 Conference Participation

KPIs (DoA): number of conference contributions

Target: 5 conference contributions/year

Members of the COVend project participated in several conferences to present their latest progress through oral and poster presentations. Table 1 lists the presentations reported by the partners.

Table 1. List of presentations at conferences, workshops, interviews and events

	Type of activity	Title	Date	Audience reached / Outcome
1	Conference participation (F4)	Military Health System Research Symposium	14/09/2022	Research community, businesses and industries, national authorities / 200 attendees
2	Collaboration with EU-funded projects	Therapeutic Clinical Trials united against COVID-19	15/06/2022	European network for COVID-19 therapeutic trials, EU-funded COVID-19 clinical trial projects / 80 attendees
3	Cluster activities	ENVISION - Highway to Health, Final event	25/01/2023	Research community, projects funded under the same call / 120 attendees
4	Collaboration with EU-funded projects (GUF)	COVIRNA, COVend, ENVISION joint webinar	05/01/2023	Researchers, clinicians, patient organisations / 30 attendees
5	Conference participation	Euroanaesthesia 2022 Congress	04-06/06/2022	Research community, businesses and industries, clinicians / 3900 attendees
6	Conference participation & Scientific poster (UCD)	UCD Conway Festival of Research and Innovation & The COVend research project aims to deliver a new therapy against COVID-19 that prevents the severe stages of the disease to demonstrate the possibilities of the Fibrin derived Peptide FX06 protecting Endothelial Cells against COVID-19 Triggered Cytokine Storm.	05/10/2022	Research community, regional authorities / 50 attendees
7	Conference participation	Euroanaesthesia 2023 Congress	03-05/06/2023	Research community, businesses and industries, clinicians / 4249 attendees
8	Interview	Past President, Honorary Member and this year's Prof	04/06/2022	Research community, clinicians / 266 viewers

		Ibsen lecture – a busy meeting for Prof Kai Zacharowski; ESAIC		
9	Interview	Becoming a Fellow of the European Society of Anaesthesiology and Intensive Care (FESAIC); ESAIC	05/06/2022	Research community, clinicians / 965 viewers
10	Interview	EA21 Newsletter: ESAIC President Elect Edoardo De Robertis: looking forward to a post-pandemic future; ESAIC	22/12/2021	Research community, clinicians / 302 viewers

[Euroanaesthesia Congress 2022](#) is recognised worldwide as one of the most important and influential annual congresses in anaesthesiology and intensive care. COVend was represented by Dr. Jan Kloka, Dr. Benjamin Friedrichson and by the project coordinator, Prof. Dr. Dr. Kai Zacharowski. Two posters were specially prepared for this occasion: while one poster gave a general overview of the project, the other one focused on the IXION clinical trial. A set of slides were also presented, in loop, during the ESAIC EU Project Booth. The event gathered a total number of 3900 attendees, among which were research community, businesses and industries, clinicians.

[COVend, COVIRNA, ENVISION joint webinar "Addressing unmet clinical needs, practices and patient outcomes: the impact of EU-funded projects"](#)- On the 5th of January, COVend together with two other EU-funded projects COVIRNA and ENVISION organised a webinar on “Addressing unmet clinical needs, practices and patient outcomes: the impact of EU-funded projects”. The COVend and ENVISION projects were represented by Dr. Jan K. Kloka and the COVIRNA project by Dr Yvan Devaux, Luxembourg Institute of Health. Panelists were Ed Harding, The Health Policy Partnership; Dr Timo Brandenburger, University of Dusseldorf; Matilda Ersson and Britt Sandberg, AMAZONA. Finally, the webinar was joined by Kelly Woods, who presented the European Open Research platform. The webinar emphasised the importance of patients’ involvement in all research projects and securing sustainable funding for research and innovation initiatives. Each project shared successful practices on how to respond to the expectations of clinicians at the same time as patients’ needs. There were also highlights on the Open Research Platform tool and its contribution to the promotion of innovations and, indirectly, their potential access to the market. The webinar gathered a total number of 30 attendees, among which were research community, clinicians and the representatives of the patient organisations.

In September 2022 COVend consortium partner Dr. Petra Wülfroth (F4) participated in **[Military Health System Research Symposium](#)**, having presented the potential use of FX06 against biological, chemical& radiation threat agents. The audience was represented by research communities, industries, international organisations, national authorities and civil society, having 200 attendees in total.

In October 2022 COVend consortium partners Zhiran Wang (UCD) and Prof. Günther Eissner (UCD) participated in **UCD Conway Festival of Research and Innovation**, showcasing the COVend project by holding a presentation on the influence of COVID-19-triggered cytokines on pulmonary endothelial cells and protection by the fibrin-derived peptide FX06. The UCD team created a specially designed poster (Figure 16) to demonstrate the possibilities of the Fibrin derived Peptide FX06 protecting

Endothelial Cells against COVID-19 Triggered Cytokine Storm. The audience was represented by research communities and regional authorities, having 50 attendees in total.

ENVISION Highway to Health – in January 2023 COVend joined the ENVISION project final event, Highway to Health in Brussels. As the EU-funded project ENVISION has come to an end, the event was devoted to the representation of its results and impact on digital healthcare while fighting COVID-19. About 60 invited clinicians, scientists, representatives of patient safety organisations and policymakers shared their vision on the promising opportunities and challenges of developing and implementing AI tools in the EU. The requirements and challenges of data collection and processing in the EU and the patient’s perspective on using personal data for research and development were also discussed during the event.

The COVend partners European Society of Anaesthesiology and Intensive Care (ESAIC), held a successful **Euroanaesthesia 2023 (EA23) Congress** from 03 June 2023 – 05 June 2023 in Glasgow, Scotland. This year’s Euroanaesthesia programme included sessions on a wide range of topics, from general anaesthesiology to intensive care, critical emergency and pain medicine, and approaching science from the different angles of patients, organs, therapies and more. All ESAIC activities and special Committee sessions were showcased in the ESAIC Expo, a central room entirely dedicated to presenting their projects and initiatives, including the opportunity for delegates to meet key stakeholders and Committees. Thus, at Euroanaesthesia 2023 COVend was represented by Dr. Benjamin Friedrichson and the project coordinator, Prof. Dr. Dr. Kai Zacharowski. Two COVend posters were exhibited at the special ESAIC EU Project Booth showcasing the project. These posters give insights into the project's accomplishments, including: Health-economic modelling facilitates market access and reimbursement decisions for FX06 therapies, FX06 alleviation of hyperinflammation and capillary leak. The event gathered 3405 delegates and another 844 exhibitors able to visit the EU-booth, where the COVend poster was displayed.

Two interviews with the Project Coordinator, Prof. Dr. Dr. Kai Zacharowski, on the ESAIC’s website were a great opportunity to promote the COVend project, as Prof. Zacharowski mentioned that the project received funding of 10 million euros from the EU to develop a new treatment FX06 to prevent and reduce the worsening of COVID-19 infection. He mentioned that as the underlying pathological disease process of COVID-19 is characterised by a continuous progression of endothelial injury, FX06, a protective substance against endothelial damage, is expected to prevent the disease from progressing from a moderate to a severe stage. And the IXION multi-centre clinical trial will assess the

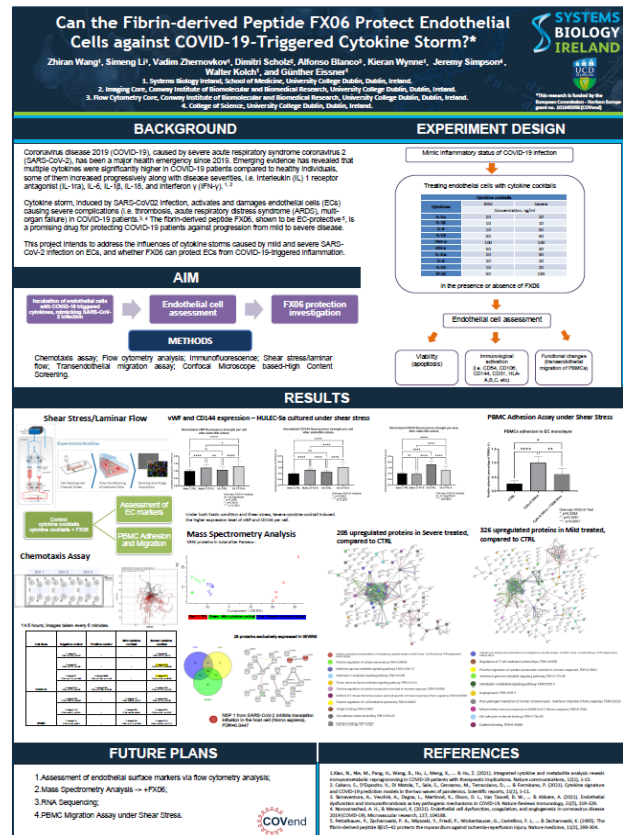


Figure 16. COVend poster "Influence of COVID-19-triggered cytokines on pulmonary endothelial cells and protection by the fibrin-derived peptide FX06" created by Zhiran Wang

efficacy of this treatment. Both articles contain the links directing to the COVend website. Both interviews gathered 1231 viewers in total, which is a good indicator of the outreach for the project.

This **interview with the COVend clinical partner, Prof. Edoardo De Robertis**, Director of Anaesthesia and Intensive Care at the Università degli Studi di Perugia, and incoming President of the ESAIC, provided an exceptional opportunity to further promote COVend. During the interview, Prof. De Robertis highlighted the importance of research initiatives such as COVend for the anaesthesiology/intensive care community. The total number of viewers for the interview reached an impressive 302 viewers.

Assessment

With 10 conference presentations and interviews already delivered halfway through the project, the partners are on track to reach the target of 15 expected conference contributions by the end of the project, especially as further results will become available in the later stages of the project.

The project's aim to reach out and share scientific & technological knowledge, data & results with the healthcare & scientific communities to facilitate current and future related research has been successful, as conferences, workshops, interviews and online events have already gathered a combined total of about 7,000 attendees/viewers. These events reach a variety of target audiences, such as the research community, businesses and industries, national authorities, clinicians, patient organisations and regional authorities, creating an impact on the achievement of promotion and facilitation of the FX06 uptake. Each event has had a specific purpose and message to disseminate, ranging from presentations on the therapeutic clinical trials united against COVID-19 to highlighting the possibilities of the Fibrin derived Peptide FX06 protecting Endothelial Cells against COVID-19 Triggered Cytokine Storm. This has resulted in an important impact and outreach among the key stakeholders, and potential collaborators, creating a positive outlook for the project's progress.

3.2.2 Publications

KPIs (DoA): number of publications

Target: 2-3 publications/year

The academic partners in COVend have already led several publications in peer-reviewed journals (Table 2).

Table 2. List of publications

	Title	Authors	Date	Journal	Downloads/ Views
1	Potential of FX06 to prevent disease progression in hospitalized non-intubated COVID-19 patients — the randomized, EU-wide, placebo-controlled, phase II study design of IXION	Kloka, J., Friedrichson, B., Dauth, S., Foldenauer, A. C., Bulczak-Schadendorf, A., Vehreschild, M., Matos, F., Riera-Mestre, A., van Asselt, A., De Robertis, E., Traskaite Juskeviciene, V., Meybohm, P., Tomescu, D., Lacombe, K., Coen D. A. Stehouwer, ..., Kai	19/08/2022	Trials, 23(1):688. BioMed Central Ltd	1243 views

		Zacharowski (IXION collaboration group)			
2	Artificial intelligence research in the COVend COVID-19 clinical trial project	Värri, A. O., Kallonen, A., Asuroglu, T., & van Gils, M.	20/04/2023	Finnish Journal of EHealth and EWelfare, 15(2), 230–234	45 downloads
3	Microvascular Leakage as Therapeutic Target for Ischemia and Reperfusion Injury	Kloka, J.A.; Friedrichson, B.; Wülfroth, P.; Henning, R.; Zacharowski, K.	09/05/2023	Cells 2023, 12, 1345	826 views

Assessment

With three peer-reviewed publications already available, the partners are on track to reaching the set target of 6-9 expected peer-reviewed manuscripts by the end of the project, especially considering that the phase of the IXION clinical study conduction is still underway and more publications are expected towards the later stages of the project as the clinical study is performed and further results become available.

3.2.3 Cluster & Policy event

KPIs (DoA): number of attendees

Target: 80 external attendees

On 4 July 2023 the two project consortia of COVend and ENVISION, held a joint [Cluster and Policy Event](#) at the Representation of the State of Hesse to the EU in Brussels, Belgium, bringing together policymakers, health authorities, clinicians, and researchers to review the scope and benefits of COVID-19 actions and get prepared for future pandemics while strengthening our healthcare systems. During the event, presentations from panel speakers and project experts highlighted the various initiatives and existing frameworks that stakeholders have put in place to be better prepared for future pandemics. The conversation provided valuable insight into the common challenges, opportunities, and collaborative efforts put into pandemic preparedness. The event concluded by presenting hopeful views for the future of European healthcare, stressing the need for secure and stable supply chains, access to valid health data, and strengthening the current crisis infrastructure.

Assessment

The event gathered 51 attendees in total, with 19 participants joining online and 32 joining in person. Although the event didn't reach the set target number of attendees, it was attended by high-ranking politicians, European Commission representatives, the COVend Project Officer, and esteemed experts from five COVID-cluster EU-funded projects, including RBDCOV, iMPact, EPIC-CROWN-2, MOOD, and XVR011 (Figure 17). Apart from presentations and panel discussions, a dedicated programme slot was included for posters exhibition, which displayed not only participating projects' posters, but those of other cluster projects funded under emergency calls, including RECOVER, CoVICIS, ENDVOC, and VASCOVID.

A tailored programme brochure (Figure 18) was created, and 40 versions of it were distributed among the participants. The brochure included the agenda, speaker profiles, a patient care pathway infographic of the cluster projects, QR-codes for event registration and Zoom invitation, and the COVend website and social media information. This was an ideal source of all the necessary event information and was actively used by all participants during the event.

A special social media campaign for the event promotion was planned and successfully implemented. The pre-event campaign comprised posts both on LinkedIn and Twitter channels announcing the dates of the event, the opening of the registration, key information about the event, including the planned agenda topics for discussion as well as introducing the speakers. The posts were boosted by increased reach when tagging the speakers' personal profiles, invited projects' pages and participating representatives' organisations. The promotion of the social media content (Figure 19) was supported by the partners' reposts and retweets, especially ESAIC, which has a rich number of their audience – 21,728 followers on LinkedIn and 9,087 on Twitter. During the event, there was an online social media stream on LinkedIn highlighting every speaker's presentation. In general, the social media strategy proved to be a success resulting in total 83 likes, 11 reposts, 1,863 impressions, 11 new followers on LinkedIn and 13 likes, 5 retweets, 573 impressions and 4 new followers.

EVENT SPEAKERS



Figure 17. The esteemed speakers of the joint Cluster & Policy Event

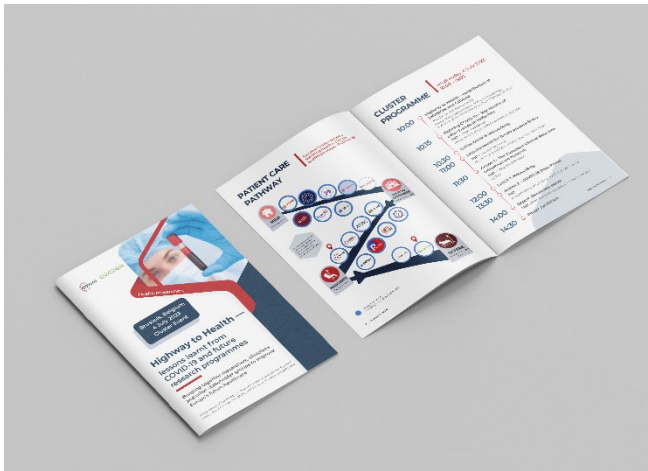


Figure 19. Event-tailored programme brochure



Figure 19. Highway to Health Event LinkedIn recap post

4 Impact assessment

The COVend consortium is constantly exploring strategies to maximise the impact of our research and develop new approaches to address the medical, societal, and economic challenges in the EU. To measure the impact of COVend, unique identifiers have been set for each key impact pathway (Table 3):

Table 3. Unique identifiers of COVend impact

KIP	Short-term indicator	Assessment
1. Creating high-quality new knowledge	Number of peer-reviewed publications	<p>The three COVend publications represent high-quality new knowledge and insights in medical research. Kloka <i>et al.</i> detail the IXION clinical trial protocol and the rigorous methodology for investigating FX06 as a therapy to prevent COVID-19 progression. This provides a valuable framework for assessing this novel treatment. Värri <i>et al.</i> share innovative approaches for analysing complex clinical trial data in concert with multi-omics. It demonstrates the potential of AI in precision medicine. The review on microvascular leakage as a therapeutic target in ischemia and reperfusion injury, Kloka <i>et al.</i> synthesise evidence about the role of the endothelium in currently critical clinical problems. It proposes targeting leakiness as a strategy for protecting tissues and organs.</p> <p>By covering major elements of the project from clinical trials to data analysis to underlying science, these publications make substantive contributions across multiple domains. Their open dissemination in international peer-reviewed journals enables wide sharing of high-calibre research. Overall these publications exemplify the project's commitment to</p>

		creating impactful new knowledge assets accessible to the scientific community.
2. Strengthening human capital R&I	Number of trained clinical monitors (CRA)	The COVend project strengthens human capital in R&I by providing training opportunities and developing talent. Conducting the multi-center IXION trial builds capabilities in clinical research and data science among staff at partner institutions. Young scientists gain experience in techniques like multi-omics analysis and biomarker validation. Partners are also training clinical monitors and research nurses crucial for trial success. Beyond technical abilities, participating in the consortium fosters soft skills in areas like collaboration, communication and project management. By cultivating this well-rounded expertise, COVend grows the next generation of R&I leaders.
3. Fostering diffusion of knowledge and Open Science	Number of transdisciplinary and trans-sectoral collaborations	The COVend project fosters diffusion of knowledge through an open science approach. Partners are sharing COVID-19 biomarker data sets with the research community via the COVID-19 Data Portal. Development of open-source software for data integration and modelling will also enable broad access. Scientific results are rapidly disseminated through publications, conferences, and cluster collaborations. By diffusing knowledge openly, COVend accelerates research impact and follow-on innovation in precision medicine.
4. Addressing EU policy priorities & global challenges through R&I	Therapeutic candidate against SARS-CoV-2 in clinical trial ph II/III	FX06 is a drug that targets the host response at the endothelium independently of disease etiology. Capillary leak is a major global challenge in intensive care, surgery and infectious diseases. For the latter, FX06 could potentially provide a solution to save lives and reduce the burden on medical staff independently of the pathogenic species and strains. EU decision makers have been informed about the new drug and the clinical trial. They will and will assess these benefits and expand the portfolio of vaccines and medicines pre-ordered and also stockpiled for crisis situations to ensure optimal medical care for the European population.
5. Delivering benefits & impact via R&I in society	Reduced severe cases of COVID-19 in Europe	The project has made advances in understanding molecular mechanics of endothelial dysfunction and capillary leak, which are common in critical medical challenges associated with ARDS. If FX06 is proven effective, it could also become a new therapy for other capillary leak associated conditions. This would deliver major benefits and impact to society by improving patient outcomes and reducing mortality for critical illnesses involving. Overall, COVend has potential for high societal impact through new therapies targeting endothelial dysfunction.
6. Strengthening the uptake of R&I in society	Increased awareness and understanding of the disease process	The COVend project strengthens the uptake of innovation by raising awareness of capillary leak and endothelial dysfunction in the development of numerous severe medical conditions. Communication activities inform the public about the potential of FX06

		<p>as a host-directed therapy targeting the endothelium. Dissemination also engages healthcare professionals through promotion of the IXION clinical trial and the biochemical results demonstrating protective effects FX06 on endothelial cells <i>in vitro</i> and in animal models. If validated biomarkers can enable precision therapy for capillary leak, COVend will build understanding of their value among policymakers and the public. Overall, the project's outreach facilitates uptake of innovation in therapies for capillary leak, host response, and biomarker-guided precision medicine.</p>
7. Generating innovation-based growth	Collaboration with European research infrastructures	<p>The COVend project contributes to innovation-based growth through collaborations with other COVID-19 research initiatives. Joint activities like the Highway2Health Cluster & Policy Event, webinars with COVIRNA and ENVISION, and forums on therapeutic trials facilitate knowledge exchange across projects. Partnerships amplify impact and foster faster translation of innovations like FX06 into patient benefit. Clustering also enables unified policy engagement to strengthen healthcare systems for future pandemics. By synergising with complementary projects, COVend catalyses an ecosystem of open innovation to address current and future critical clinical needs.</p>
8. Creating more and better jobs	Number of researchers recruited at project partners	<p>The COVend project contributes to creating high-quality jobs and careers in healthcare R&I, especially in emerging fields like medical data science and precision medicine. The multi-omics analysis of COVID-19 biomarkers employs and provides training for specialists in bioinformatics and AI-assisted decision-making. Partners are recruiting young scientists whose careers will benefit from experience in biomarker research and precision therapy development. If validated biomarkers can improve COVID-19 prognosis and treatment decisions, this could create further jobs in molecular diagnostics and stratification. Overall, by advancing precision therapy and equipping researchers with new biomarker analysis skills, COVend creates more and better jobs in emerging and sophisticated fields of medicine.</p>
9. Leveraging investments in R&I	Enrichment of the COVend partners portfolio	<p>The COVend project builds on previous investments and research into the fibrin-derived peptide FX06. The potential of FX06 to treat capillary leak has been explored in animal and (pre-) clinical studies in various disease areas. COVend leverages these prior R&I investments by now assessing FX06 as a therapy for COVID-19 and endothelial dysfunction. The project benefits from the partners' expertise in areas like biomarker research, health economics, and clinical trial design. If successful, COVend will catalyse further R&I investments into treatments targeting the endothelium. This leveraging of prior knowledge and unique expertise</p>

		maximises the impact of investments in developing new therapies.
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The progress of the project so far towards delivering scientific impact:

The COVend project has had a significant impact in various areas of COVID-19 research and beyond, such as biomarker research and health technology. In WP2, toxicological studies for FX06 have been completed, which will pave the way for clinical trials assessing its efficacy in capillary leak-associated clinical conditions. Major breakthroughs have been achieved in the development of assays for the characterisation of endothelial cells (ECs), transendothelial migration and gene expression upon stimulation with COVID-19-triggered cytokines (WP5). FX06 has shown beneficial effects under multiple conditions in the context of endothelial hyperinflammation models in vitro. Another important aspect of the project has been the substantial theoretical work on data management, including standardisation, anonymisation, pseudonymisation, harmonisation, sharing, and analysis. This work has increased preparedness for future pandemics, providing a framework for efficient and effective data management in clinical research.

The progress of the project so far towards delivering economic impact:

The scientific results already obtained in WP5 and WP7 of the COVend project advance the comprehension of capillary leak in COVID-19 and in other diseases and help to understand their economic impact. This progress contributes to families, employers, and the working population benefiting from the project by reducing economic impact and recovery time. Healthcare professionals, hospitals, and the pharmaceutical industry will profit from the project, as it will reduce costs and provide a new therapeutic option.

The progress of the project so far towards delivering impact for society:

Capillary leak is a common complication that occurs in ARDS, reperfusion injury, and numerous infectious diseases and is associated with high morbidity and mortality rates. No therapeutic option is available for capillary leak yet, thus it remains a largely unmet clinical need with strong impact on economy and society. But the COVend project is making steps towards its contribution to the portfolio of COVID-19 therapeutics and to new effective therapies for the clinical management of COVID-19 disease, including the prevention of disease progression to severe illness and hospitalisation. The primary impact of the project is on patients with moderate COVID-19 disease, as personalised FX06 therapy can prevent severe illness and hospitalisation. The societal impact of the COVend project extends far beyond the current pandemic. The most widespread causes of capillary leak, ARDS and reperfusion injury, affect millions of patients annually worldwide. By providing potential therapeutic options for these conditions, the COVend project could contribute to improving patient outcomes, reducing the workload on medical staff and healthcare costs, and enhancing the quality of life of patients and their families.

5 Conclusions and measures for improvement

Assessing the impact of each of the implemented COVend communication and dissemination activities has provided us with insights on what has contributed to the success of some measures so far and how to further improve the measures and their effectiveness.

With COVend being actively represented by the partners at various conferences and seizing every opportunity to network with other projects and initiatives by participating at relevant events, we have been able to benefit from the extended network of interested stakeholders. Sharing project updates and events on the existing channels help us spread the word further, successfully increasing the reach of our communication activities. The joint ENVISION & COVend Cluster and Policy Event is a good example of an activity that has drawn a substantial number of attendees from other EU- funded cluster projects consortia as well as external stakeholders, such as policymakers and politicians. At the same time, this assessment has also revealed less successful measures, such as the IXION newsletter, which is currently reaching a limited audience, requiring further efforts in increasing regularity of this content production, thus reaching an extended number of stakeholders. This prompts us to reconsider the content and availability of other languages versions. The same concerns can be applied to the change of our promotion approaches and distribution channels for a quite a rich number of created materials, such as posters, factsheets, future issues of press releases with the relevant information on the project's progress. In case, despite the improvements, we do not observe an increased popularity over a longer period of time, we will reassess the value of the measures to be applied to the activities that haven't reached the set key targets so far.

As the COVend website analytics have shown, the project's dynamic content is an integral part in reaching a wider audience, thus we are going to focus on those more. Cross-sharing materials and information between the project's website and social media channels, has proven to be a successful means to push outreach and increase the project's visibility. The two types of channels complement each other well: while social media creates immediate visibility, the website constitutes a stable source of information for stakeholders to return to. Analytics demonstrate that pages containing older content, such as the Clinical Trial and Research&Innovation, are still viewed after having been online for a longer time. It is thus important to refresh those with more relevant and updated information and create access to all public materials and content via the project website.

Evaluating the two social media channels COVend makes use of, the data suggest that LinkedIn has a rather limited impact compared to the more influential LinkedIn. Overall, the efforts will be taken to produce a high-quality project-related content on both channels with an increased regularity and redirection to the website.

Crucial to maximising the impact of COVend is the active involvement of all partners. For instance, to publish project news while the content is still relevant, accelCH, who manages the website, relies on timely notifications from all other partners. The reach of communication material, e.g. press releases, factsheets, posters, etc., also depends on partners' efforts to share such material with their organisations' well-established channels and media connections. In addition to reminding and pushing partners to take more initiative in the area of communication and dissemination in general, we will also encourage the local translation of existing materials and offer support where necessary to increase our regional/local reach.

6 Outlook

Several activities described in the previous sections are ongoing and will keep being implemented throughout the duration of the project and additional ones are planned for the upcoming months, as detailed in the DCP (D8.3), though for the years 2023-2024 priority will be given to the following:

- Continue building a community around social media channels of Twitter and LinkedIn by creating a high-quality project-related content with the active involvement of the partners in the content creation process.
- Publish further IXION clinical trial newsletter issues and press releases, growing the community of subscribers through the events organised by the project and its social media reach.
- To continue raising awareness of the IXION study and facilitating the patient recruitment by successfully implementing communication and dissemination activities with a wider outreach. For example, one of the upcoming tasks would be to effectively disseminate a flyer and a poster addressed to the medical personnel of our clinical partners in the different clinical sites, prepared by the partners from Fraunhofer (Figure 20).



Figure 20. IXION clinical trial promotional poster

- Implement a strategical approach in the distribution of the [survey](#) on COVID-19 medication use in clinics across Europe targeted to hospital personnel with access to historical data on medication used in the treatment of COVID-19 patients, prepared by the partners from UMCG.
- Reconsider the current information and resources available on the website and make appropriate adjustments to keep the website up-to-date and informative, especially such pages as “Clinical Trial”, “Research & Innovation”, “Objectives” and “COVID monthly tracker”.
- Reconsider the measures, approaches and distribution channels for the created communication materials usage for increased promotion and visibility of the project.
- Implement the distribution of the training & site initiation documentation according to the established strategy in the D8.2 report once the project’s clinical trial is initiated.
- Ensure the involvement of the European trial network to facilitate knowledge transfer and peer feedback, by organising workshop sessions according to the established strategy in D8.4 European trial network workshops.
- Present an extended report on the results and outcomes of the COVend Cluster and Policy Event in the D8.7 COVend Cluster event report.