



Open Pharma

Transparency in the communication of pharmaceutical research

Open Pharma[™] is a member-led, non-profit-seeking collaboration set up in recognition that improving trust in pharma research publications is a goal shared by multiple stakeholders working across the pharmaceutical, publishing, and medical communications sectors, and one only realised through collective action.

Oxford PharmaGenesis, an independent Health Science consultancy, launched Open Pharma to drive positive change in the communication of pharma-sponsored research. The collaboration brings together some of the most influential pharmaceutical firms across the globe to drive for open research practices, such as open access publishing and plain language research summaries (PLS).

Given that research is not only important for the scientists and researchers, but also for healthcare professionals, patients, research participants, funders and the public, it is important that research findings are available for all. The mission of Open Pharma is to drive improvements in the communication of healthcare research - to make the dissemination of pharmaceutical industry research results faster, more transparent, more accessible and more efficient and sustainable than at present. This can be realised by adopting practical measures, such as increased disclosure of study protocols and data, dedicated staff ensuring ethical separation between commercial and scientific activities, and the implementation of open research practices.

Open Pharma works to engage, campaign and to educate others about the benefits of open research and the ways in which they can implement best practices, with a goal for greater uptake by everyone involved in the communication of pharma-sponsored research.

By embracing and advocating for open science practices within the pharmaceutical industry, including open access, which allows for unrestricted access to research papers, Open Pharma can improve transparency and drives forward medical science, which can lead to improved patient care.²

2 - Horton, P.N., Simon (2023). The changing open research landscape: a publisher's perspective. [online] Open Pharma - Innovations in medical publishing. Available at: https://www.openpharma.blog/blog/accessibility/open-access/the-changing-open-research-landscape-a-publishers-perspective/ [Accessed 9 Jun. 2023].

^{1 -} Gordon, J. (n.d.). Open Pharma: Driving Positive Change in the Communication of Pharma-Sponsored Research.





What is Open Pharma?

Open Pharma is a collaboration of forward-thinking representatives from organisations working across pharmaceutical and healthcare research communications, alongside healthcare professionals, regulators, patients, and other stakeholders, who believe that innovating the current publications model for pharma research is essential to accelerate medical progress, improve patient care, and increase trust in evidence from the pharma industry.

The collaboration includes 16 Member and Supporter companies representing the pharma and publishing industries and is facilitated by Oxford PharmaGenesis, a Health Science consultancy. Members and Supporters contribute to Open Pharma financially at different levels. Members advise and vote on the strategic direction for Open Pharma, and both Members and Supporters engage in discussions, events, and research projects. Current Open Pharma Members include AstraZeneca, Boehringer Ingelheim, Galápagos, Gilead Sciences, GSK, Janssen, Novartis, Novo Nordisk, Oxford PharmaGenesis, Pfizer, Takeda, and UCB, and current Supporters include Bristol Myers Squibb, Ipsen, Roche, and Taylor & Francis. There are also non-paying stakeholders which include advisors (across various roles and positions) and followers.

Working as a think tank, Open Pharma seeks to "move the needle," and it's also a research hub that produces evidence, a knowledge-sharing "club," and a forum for pharmaceutical industry voices. The research, resources, and events produced by Open Pharma are designed to educate, broaden perspectives, and foster connections. Open Pharma works to identify needs and solutions, and to develop guidance that supports best practice and positive change across the sector.

Open Pharma aligns with the following principles of research integrity.

Trust: Open Pharma strives to build trust within the scientific community and among the public by advocating for open access publishing. By promoting transparency and making research freely available, Open Pharma fosters trust in the way science is reported / communicated.

Communication: Open Pharma focuses on the importance of effective communication for accessibility and advancing medical science and patient care. By advocating for open research (including open access publishing, plain language summaries and publication enhancements), the collaboration advocates for the dissemination of research findings to a wider audience, and a lay audience, helping to promote accessibility and knowledge sharing.

Accountability: Open Pharma enables discoverability, attribution and thus accountability of healthcare research, across the research lifecycle through to publication and impact.

Transparency: Through the promotion of open research, including open access publishing, clinical trial transparency and data sharing, Open Pharma works to make research findings openly available to the public and scientific community. This allows for greater analysis, replication, collaboration and enhances the credibility and transparency of the research process.

Rigour: Open Pharma is committed to advocate for rigorous scientific standards in healthcare research by encouraging and supporting researchers to adhere to recommended methodologies, guidelines and peer review processes.





Supported by these principles of research integrity, Open Pharma aims to improve the pharma publications model by focusing on four core pillars.³



O4 **Discoverability** - To provide guidance for producing targeted content for each user group, available from a single point.

^{3 -} Open Pharma - Innovations in medical publishing. (n.d.). About Open Pharma. [online] Available at: https://www.openpharma.blog/about-us/ [Accessed 9 Jun. 2023].





Why should the Pharmaceutical Industry adopt Open Research practices?

Open Research is a broad term referring to an array of behaviours promoting greater transparency throughout the research lifecycle.⁴



Figure 1 Open Research is a broad term referring to an array of behaviours promoting greater transparency throughout the research lifecycle (Figure produced by Taylor & Francis)⁴

Widespread implementation of open research principles across universities and academic research centres represents a fundamental culture shift in the way that basic science has traditionally been conducted⁴. There seems to be a correlation between trust in science and open research: a study found around 59% of the public trust research by university scientists "completely" or a "great deal", in comparison to 32% for research carried out by the pharmaceutical industry⁵, where there is lesser uptake of open research practices.

There are also strong economic incentives for greater adoption of open research practices. A study published by the European Union (EU)'s Directorate-General for Research and Innovation in 2018 estimated that a lack of 'findable, accessible, interoperable and reusable' (FAIR) data costs the EU economy approximately €10.2 billion each year. Much of the loss incurred was through duplication of research activities and an inability to build on previous investigations.⁶

Adoption of open research practices, most notably open access, can improve transparency in the communication of healthcare research, advance medical science and, Open Pharma believes, ultimately improve patient care.²

^{4 -} Open Pharma - The changing open research landscape: a publishers perspective. (13 Feb 2023). Blog. [online] Available at: https://www.openpharma.blog/blog/accessibility/ open-access/the-changing-open-research-landscape-a-publishers-perspective/ [Accessed 16 Feb. 2024].

^{5 -} Figshare. (2020). Open access case for pharma. [online] Available at: https://openpharma.figshare.com/articles/online_resource/Open_access_case_for_pharma/13073174. 6 - European Commission, Directorate-General for Research and Innovation, Cost-benefit analysis for FAIR research data - Cost of not having FAIR research data, Publications Office, 2018, https://data.europa.eu/doi/10.2777/02999 [Accessed 19th Feb. 2024]





Why is transparency in pharmaceutical research important?

Pharmaceutical research tackles some of the biggest health challenges and threats faced by the global population each year. Pharmaceutical institutions across the world produce, investigate, and publish research that aims to improve lives through various treatments, devices and diagnosis outputs. The research isn't only important for the scientists and researchers, but also for healthcare professionals, patients, the participants, the funders and the public.

For healthcare professionals, it is important for them to have fair and equitable access to pharmaceutical research to ensure best quality healthcare for all. Currently, due to paywalls, some healthcare specialists rely primarily on research abstracts posted on the internet to access relevant information. Consequently, certain decisions are more likely to be based on the conclusions drawn from abstracts rather than full text article.⁷

"I won't pay because it's so expensive. I'm never going to pay \$45 for an article. I just do without" - Adult pulmonary/critical care specialist⁸

Open research also recognises the role of patients when it comes to diagnosis and treatment, empowering them with the information that can enable them to have better understanding and be active in their own care. Though the adoption of open research practices, patients who are invested in learning more about their treatment or condition have the opportunity to access information and to trust in the treatment they are being given.

"There is a difference between patient and public. There is a change in mindset. Some of you may have found this out yourselves already, you may find it out later in your lives for you or someoneyou care about. When you actually become a patient and you need a doctor, this whole issue of trust, shifts. You are not sitting there watching television or reading a newspaper, thinking, do I trust what I'm being told. You're sitting in front of someone because something has gone wrong and you actually want them to help you." - Richard Stephens, Patient Advocate and Co-Editor in Chief of Research Involvement and Engagement⁹

^{7 -} Barry HC, Ebell MH, Shaughnessy AF, Slawson DC, Nietzke F. Family physicians' use of medical abstracts to guide decision making: style or substance? The Journal of the American Board of Family Practice Nov 2001, 14 (6) 437-442;

^{8 -} Maggio LA, Moorhead LL, Willinsky JM Qualitative study of physicians' varied uses of biomedical research in the USABMJ Open 2016;6:e012846. doi: 10.1136/bmjopen-2016-012846

^{9 -} Open Pharma (2022) Open Pharma symposium: Who can we trust? Open science and pharma research. Available at: https://www.youtube.com/watch? v=z5F3vy6Kq6c&t=2739s (Accessed 15 June 2023).





Importance of Open Access to achieve Transparency

Pharmaceutical companies, which fund approximately half of all biomedical research¹⁰, are now leaders in the publication and disclosure of research.^{11,12} However, access to much company-funded research is restricted by journal paywalls.¹³ To achieve greater transparency, those results should be accessible to the public in a timely manner. By publishing open access, pharmaceutical firms can ensure that the highest quality, peer-reviewed scientific research content is available to anyone to read, share, reuse and build upon without payment of a one-off access charge or subscription.

"Open Access is all about transparency. It's about getting access to the latest literature and research for healthcare professionals and, increasingly patients. We want everyone to be able to access our research immediately and help them get a diagnosis for their patient, do further research to improve access to medicines and patient care."

- Christopher Rains, Vice President of Global Medical Affairs at Takeda and Co-Founder of Open Pharma⁹

Summary of the key benefits

Open access publishing benefits the pharma industry by increasing stakeholder trust, providing long-term savings and supporting internal sustainability and social responsibility. The benefits of open access reach beyond the pharma industry and span across the research an innovation sector. Open access can:

- Enable access to complete evidence and thus increase knowledge, transparency and trust from all stakeholders in healthcare.
- Increase health care professionals' downloads of publications.
- Strengthen scientific exchange, improving collaboration, education and innovation.
- Improve the speed of dissemination and the reach of research.
- Provide sustainable publishing business models.

Furthermore, open access publication can enhance the impact of research and open access journals can have high citation metrics. Additionally, the copyright licenses typically used in open access publications can facilitate dissemination of scientific findings. The most permissive Creative Commons Attribution (CC BY), for example, allows reusers to distribute and adapt the content without needing to contact the author for permission (credit must still be given to the author).

13 - Ellison TS, Koder T, Schmidt L, Williams A, Winchester CC. Open access policies of leading medical journals: a cross-sectional study. BMJ Open 2019;9:e028655.

^{10 -} Dorsey ER, de Roulet J, Thompson JP et al. Funding of US biomedical research, 2003–2008. JAMA 2010;303:137-43.

^{11 -} Baronikova S, Purvis J, Southam E et al. Commitments by the biopharmaceutical industry to clinical trial transparency: the evolving environment. BMJ Evidence-Based Medicine= 2019:bmjebm–2018–111145.

^{12 -} Warren M. Big pharma is embracing open-access publishing like never before. Nature, 2019. Available from: www.nature.com/articles/d41586-019-00610-2 (Accessed 3 = October 2019).





How does Open Pharma advocate for Open Research?

Open Pharma provides support, resources and facilitates opportunities for its members and supporters to communicate needs and share expertise to champion open research. There is a focus on the following 5 activities:



Engage – Facilitating discussions and events to enable conversations and increase engagement within and between companies in the pharma industry - researchers, healthcare professionals, the wider scientific community, and the public.



Campaign – Supporting campaigns to spotlight issues, newly developed tools or systems and promote best open research practices.



Standardise – Encouraging adoption of open research for the pharmaceutical sector and standardising open research procedures.



Measure – Monitoring developments in the sector and identifying areas of success and areas for improvement, to promote continued progress toward open and transparent practices.



Educate – Developing a range of accessible educational materials and resources that increase understanding and make open research more accessible.





ENGAGE

One of Open Pharma's primary endeavours is to foster connections between the pharmaceutical industry and its stakeholders, and to ensure that everyone involved and impacted by pharmaceutical research have the opportunity to engage in discussions about that research.

To help bridge the communication gap often present in the industry, Open Pharma seeks to develop events that stimulate debate between stakeholders who do not often have the opportunity to meet, and to bring fresh voices into the conversation. This allows people to share their challenges and needs, and facilitates discussions towards appropriate solutions.

Steps towards an Integrity-Based Publication Model by Facilitating Discussions with Community Stakeholders¹⁴

Pharmaceutical publications have long grappled with the challenge of satisfying diverse stakeholders. However, in an era where research integrity is paramount, does the current publishing model have the potential to please *some* of the people *some* of the time? This critical question served as the focal point for recent thought-provoking Open Pharma talk shows in February 2023, now readily accessible on YouTube. The talk shows brought together patient advocates, doctors, policy advisors, charitable funders, open access advocates, and publishers for a wide range of views.

Furthermore, in a significant stride towards improving engagement on open research, Open Pharma organised a Satellite Symposium at the Association of Learned and Professional Society Publishers Annual Conference 2022. This event brought together representatives from the pharmaceutical industry, publishing sector, medical communications, and patient advocacy to exchange insights and explore collaborative initiatives aimed at bolstering trust in pharmaceutical research.

Attendees brought their lived experiences and expertise to the table to discuss what defines trust means in the pharmaceutical industry and how Open Access can increase trust and transparency:

"For Takeda, rare diseases is a major part of our focus area. The diagnostic journey for rare diseases is quite traumatic. The average rare disease patient takes 7-8 years for them to get an accurate diagnosis. We believe that having access to literature freely and in a timely manner should help that diagnostic journey for rare disease patients." - Christopher Rains, at the time Vice President of Global Medical Affairs at Takeda and Co-Founder of Open Pharma

^{14 -} Osório, J., Chisholm, A. (2023). Open Pharma talk shows available on YouTube: listen, understand ... act. [online] Open Pharma - Innovations in medical publishing. Available at: https://www.openpharma.blog/blog/news/open-pharma-talk-shows-available-on-youtube-listen-understand-act/ [Accessed 9 Jun. 2023].





"Open access simply means, we just want to be able to check on what we're being told and make up our own minds. If we continue to not have open access, that is implicitly feeding the arguments of the people who don't trust. It is fuelling the negative and begs the question: well, what is it they're hiding? What is it they're not telling us. That is no way to move ahead with evidence-based medicine." - Richard Stephens Patient, Patient Advocate and Co-Editor in Chief of Research Involvement and Engagement

Through Open Pharma holding events focused on the sharing of expertise and lived experiences, stakeholders contribute to the larger goal of advancing transparency, honesty and accessibility within the pharmaceutical industry. The collective efforts of stakeholders can shape a more effective and trusted publication model that benefits all involved parties, from pharmaceutical companies, to researchers, healthcare professionals and patients.





CAMPAIGN

Open Pharma has launched and participated in a range of advocacy campaigns to raise awareness about the importance of transparency and open research within the pharmaceutical industry.

Facilitating open and honest discussions around pressing topics is integral to positively shaping how the pharmaceutical industry communicates its research. By engaging a wide range of stakeholders, research integrity principles can be embedded within discussions and thus influence further industry wide actions.

Presence at Congresses and Other Meetings

Open Pharma is a regular presence at international meetings and events involving pharma industry professionals, publishers, and medical writers. In 2022 and 2023, its Members and Supporters held roundtables, workshops, and session presentations on open access and PLS at the European and annual meetings of the International Society of Medical Publications Professionals (ISMPP), the Council of Science Editors meeting, and the Berlin and Riga meetings of the European Medical Writers Association.

Open Pharma Blo

Open Pharma delivers open science news and commentary via their blog and e-newsletter. In addition to a weekly digest of short news stories, the blog feature's opinion and commentary pieces from expert guests. The blog also raises awareness of events of interest and useful tools and resources.

Topic Meetings, Roundtables, and Working Group's

Open Pharma has a program of discussion meetings that provide opportunities for Members and Supporters to explore specific topics internally and with external guests. Members and Supporters also take part in working groups, which develop projects in several areas of open science. All these activities help the group identify unmet needs and potential solutions in the communication of pharma research.

For example, the virtual roundtable meeting Pharma and Publishers Forum in June 2022 brought together participants from the publishing and pharma sectors to discuss four core topic areas in open science - PLS, open access, discoverability, and data sharing. The participants identified several unmet needs and potential solutions in these areas, which the Open Pharma working groups and other organizations can help to address. For example, how to use keyword selection to better optimise the discoverability of research outputs whilst maintaining readability.





STANDARDISE

One of the primary objectives of Open Pharma is to promote standardised procedures for the communication of pharmaceutical research. By collaborating with a range of stakeholders including industry partners, researchers and regulatory bodies, Open Pharma advocates for consistent processes for data reporting, publication and communication of research.

Open Access Position Statement²

The first landmark achievement of Open Pharma was the open access position statement, which had the following aims:

Immediate Priority: "To secure authors publishing company-funded research the same right to publish open access as authors publishing research funded by other sources, so that all research can be made free to read from the date of publication."

Benefit – "Enables pharmaceutical companies to follow the lead of other research funders in requiring all the research they fund to be published with open access, without impacting on journal choice."

Long-Term Goal: "To secure authors publishing company-funded research the same terms as authors publishing research funded by other sources, so that all research can be made free to read - and reuse -from the date of publication."

Benefit – "Enables pharmaceutical companies to follow the lead of other research funders in maximising the impact of the research they fund on patient health."

As of May 4 2023, the position statement has been endorsed more than 250 times by individual and institutional stakeholders - including publishers, pharma companies, patient advocacy groups, and organisations engaged in open scholarship - and is likely to have contributed to the rise in open access publishing observed across the sector in recent years.





Plain Language Summary Recommendations¹⁵

Scientific writing can be difficult to understand and often inaccessible to the general population. PLS are now a standardised way to make the content of medical research articles accessible to non-specialist and time-challenged readers. They offer a clear overview of the research in non-technical terms that is accessible to any reader, experts and non-experts alike.

Until 2020, however, consistent guidance on how to develop standard PLS was lacking, which limited their use. Open Pharma responded to this by developing and publishing a PLS recommendations article and infographic. With more than 10,000 views and eight citations to date (as of May 25, 2023), the article is likely to have contributed to important changes in research publications, including an emerging consensus about PLS guidance among some publishers, adoption of mandatory policies or recommended PLS practices by pharma companies, and an update to the Good Publication Practice Guidelines for Company-Sponsored Biomedical Research¹⁶ advising publication of a PLS for all clinical research articles.

The are ten recommendations for producing effective PLS documents. The recommendations cover three themes: style, process and content, all spanning across the principles Open Pharma adopted to support research integrity.

For style, the recommendations are that the documents should be targeted at a broad audience using concise and understandable language under 250 words focusing on the principle of effective communication and trust. The content should be consistent with, and linked to the original source, thus aligning with the principles of transparency and rigour.

There are 5 recommendations covering process, detailing that PLS documents should be: Co-developed; user tested, peer reviewed, free to read and tagged with appropriate metadata. Together, these recommendations support trust, accountability and rigour.

Improving Open Researcher and Contributor iDs to Improve Transparency¹⁷

A study funded by Open Pharma focused on one way that developing standardised procedures within the pharmaceutical publishing process can encourage accuracy and transparency in the communication of research. An increasing focus on standardisation can help to improve rates of transparency, communication, collaboration and honesty amongst the scientific community as well as the public.

Open Researcher and Contributor iDs (ORCID) provide authors with a persistent and unique identifier, aiming to enhance transparency, accountability, discoverability, and ultimately trust among medical researchers. Some leading pharmaceutical companies have launched initiatives to increase ORCID registration for their researchers. However, previous research indicates low inclusion of ORCID's in pharma-affiliated publications on PubMed, with inconsistent listing by prolific authors.

In a study focusing on Future Science Group journals, which support the communication of pharmasponsored research and collaboration, researchers evaluated the impact of workflow changes on ORCID submissions. The experiment revealed a significant increase in uptake of ORCIDs captured at various stages of the publishing process, as a result of prompts implemented throughout the workflow. This research highlights the efficacy of implementing such prompts, specifically at the revised draft and proof stages, in increasing ORCID submissions.

 ^{15 -} Rosenberg, A., Baróniková. S., Feighery, L., Gattrell, W., Ol senm R. E., Watson, A., Koder., Winchester. C (2022) Infographic: Open Pharma recommendations for plain language summaries of peer-reviewed medical journal publications, Current Medical Research and Opinion, 38:6, 881-882, DOI: 10.1080/03007995.2022.2072570 [Accessed 2 November].
16 - DeTora LM, Toroser D, Sykes A, et al. Good Publication Practice (GPP) guidelines for company-sponsored biomedical research: 2022 update. Ann Intern Med. 2022;175(9):1298-1304. DOI:10.7326/M22-1460

^{17 -} Dormer, L., Sabir, S., Walker, J. and Farrow, P. (n.d.). Improving the use of ORCID: a publisher case study WHY WAS THIS NEEDED? [online] Available at: https://www.openpharma.blog/ wp-content/uploads/2021/04/Dormer-et-al_poster-28_final.pdf [Accessed 9 Jun. 2023].





MEASURE

Open Pharma develops and utilises robust metrics and frameworks to measure the changes in how research is communicated across the pharmaceutical landscape. Doing this and tracking the progress and impact of the work Open Pharma do is a valuable way to ensure the activities carried out have the maximum effect.

By monitoring developments in the industry, Open Pharma helps identify areas for improvement and promote continued progress toward open and transparent practices helping to foster trust in research outputs.

Developing a Benchmarking Tool to Measure the Frequency of Open Access Articles Acrosshe Pharmaceutical Landscape¹⁸

To investigate possible open access bias in the publication of pharmaceutical research, one must be able to benchmark and track open access publication patterns in different research settings in an objective way.

Since 2018, Open Pharma have analysed and reported on open access rates of pharma-funded research, using both manual and automated methods. In 2023, they collaborated with the Lens platform to develop a free-to-use, publicly available online benchmarking tool to provide insights into the current state of open access publishing practices and emerging trends. This information can then be used to guide the development of open access publishing goals to encourage greater adoption and equity of open access publishing across sectors.

A snapshot of the initial data was presented as a poster, at the 20th Annual Meeting of ISMPP in 2023.

The research showed that articles with university-affiliated authors are published with the most permissive license (CC BY) more often than articles with pharma company-affiliated authors. However, the analysis was not designed to determine whether this difference is driven by journal or author policy. The Open Pharma tool can help us to assess how changing perceptions of open access translate into changes in practice.

To access the tool, see here for more information: <u>https://www.lens.org/lens/report/view/**Open-Pharma-open-access-analysis-dashboard**/14572/page/14573</u>

^{18 -} www.congressposter.com. (n.d.). Benchmarking open access in publications with authors affiliated to pharma companies and universities. [online] Available at:= https://www.congressposter.com/p/47hnk1uoz7ltsm5u [Accessed 9 Jun. 2023].





EDUCATE

Open Pharma places significant effort towards creating a range of accessible educational materials and resources to empower stakeholders to advocate for open research.¹⁹ They have developed a bank of resources that are freely available on their website for anyone to use and download. This material can help medical writers, pharma companies, and publishers to become more aware of open research and implement open research practices in their day-to-day work. Resources include a crib sheet for developing PLS documents, a toolkit for adopting ORCID in publications, and educational slides about open access.¹

These educational materials include:

A blanket definition for open access

A discussion on the benefits of open access to different stakeholders in medical publishing

A description of the different open access options that are available, including a deconstruction of Creative Commons licences

A summary of guidance provided by open access initiatives and declarations, including by Open Pharma

Information on open access options offered by journals, open access requirements of research funders and Plan S

Advice on what steps researchers and funders can take to overcome the barriers to publishing open access

Recommendations on how to avoid predatory publishers when publishing open access.

The online materials focus on actionable steps, empowering individuals and organisations to implement open access practices and become advocates themselves. Since their release, the online materials have gained over 1240 views and 368 downloads (as of November 2023), gaining traction on social media through reposts. These resources enable conversations, promote best practices and increase rates of collaboration between researchers, the wider scientific community and the public.

^{19 -} Ellison, T., Koder, T., Farrow, P., Cusack, J., Rees, T., Macdonald, S., Sabir, S. and Watts, Z. (2019). Open Pharma Educational Materials Open Access. [online] Available at: = https://openpharma.figshare.com/articles/presentation/Open_Pharma_Educational_Materials_Open_Access/7982960 [Accessed 7 Jul. 2023].





Closing Statement

The Open Pharma collaboration demonstrates how the principles of research integrity can be woven throughout a variety of activities seeking to shape a wider pharmaceutical industry landscape.

By facilitating and participating in advocacy-based activities, Open Pharma brings together a range of stakeholders to discuss and act upon the challenges facing the industry. Facilitating such open and honest discussions around issues of trust and transparency empowers experts, industry leaders and patients to shape the pharmaceutical research landscape. By highlighting the benefit these principles can offer the pharmaceutical industry, they influence actions and initiative amongst members and throughout the industry to tackle challenges that will benefit researchers, healthcare professionals, patients, the pharma industry and the wider scientific community.

Overall, the Open Pharma initiative develops, facilitates, and encourages open research activities and opportunities for all stakeholders in pharmaceutical research.

"There is a clear link between open science, research integrity and public trust. The pharma industry can lead the change towards more open communication of medical research, but collaboration within and beyond the pharma sector is essential to accelerate the pace of progress." - Joana Osório, Communications Team Leader and Project Lead of Open Pharma, Oxford PharmaGenesis Ltd

If you would like to get involved with Open Pharma, such as becoming a Member or Supporter you can find more information on the website, https://www.openpharma.blog/about-us/, where you can also sign up to their newsletter.

Thank you to Oxford PharmaGenesis for their time and providing direction to relevant resources and materials used throughout this case study.