

How AI-powered machine translation can help bring focus to decentralized clinical trials



R&D teams across the globe are starting to discover the substantial benefits of integrated machine translation. **We explore how below.**

Global spending on R&D is expected to reach \$99.2 billion in 2026 by the projected top 10 pharmaceutical companies alone,¹ underscoring just how big a growth sector it is within the life sciences. Yet the traditional model of conducting clinical trials within R&D is being challenged by factors such as participant recruitment, geographical limitations, and the need for real-world data.

As a result, organizations are increasingly shifting towards a decentralized trial model. Doing so offers a solution by leveraging digital technologies and remote monitoring to conduct trials outside of traditional clinical settings, enabling broader participation and enhanced data collection.

The hidden cost of global R&D

Decentralized trials do present unique challenges though, particularly around ensuring effective patient engagement and communication. Specifically, language barriers can hinder your trial participants' understanding of study protocols, informed consent forms, and other essential trial materials. This inevitably leads to misunderstandings, compliance issues, and ultimately, compromised study outcomes. Additionally, remote patient engagement requires innovative approaches to communication and support, to avoid disconnection or isolation from the trial process.

Already a costly endeavour, your R&D teams cannot afford participation dropouts due to linguistic issues if they are to drive value to the wider organization in such a competitive market space. To help support participants to remain onboard and committed throughout clinical trials, then, your R&D teams need to be able to communicate accurately and timely—that is, in real-time—with them in their native language.

The key role of AI-powered machine translation in clinical trials

The means of achieving the above lies in integrating AI-powered machine translation (MT) into your R&D workflow, opening up real-time communication in any language. And in addition to trial participant engagement, MT holds much broader benefits to your organization's R&D activities:

1. Making global collaboration local:

Organizations no longer need rely on siloed expertise based on geography. Through real-time MT, R&D teams can collaborate instantly, globally, and with no linguistic barriers. Consider the greater breakthrough potential—as well as cost-effectiveness—of turning your diffuse R&D teams effectively into a single operation.

2. Accelerated research timelines:

AI-driven translation systems streamline R&D communication processes, enabling faster dissemination of research findings, collaboration on multi-centre clinical trials, and alignment on research protocols and methodologies. In the fight to stay competitive in the face of widespread patent expirations in 2026, and the ongoing implications of the Inflation Reduction Act (IRA) of 2022, the cost savings achieved through working faster and leaner in this way could prove pivotal to your company.

3. Highspeed literature: MT enhances the accessibility and speed of scientific literature and research findings across linguistic boundaries on the widest scale. Your researchers can leverage higher quantities of translated materials to gain insights into emerging trends, breakthrough discoveries, and best practices in their field from across the globe far sooner than if they were produced by human translators.

Key to successful MT integration is finding a solution provider that understands the nuances of R&D terminology and with deep industry knowledge. Their offering should scale to match not only your current translation needs – but also those that form your future growth strategy. And it must easily integrate into your existing workflows, helping you save further time and money.

Which MT solution is right for you? The answer is...

Language Weaver best answers the call for an infinitely scalable, effortlessly integrated, real-time translation solution that is already used and trusted by many of the world's top pharmaceutical companies. Secure-by-design, it never compromises patient data and confidentiality, nor that of your organization.

Language Weaver translates over 3,000 language combinations and 150+ direct language pairs at a rate of 100,000s+ words per minute within your existing workflows. Its state-of-the-art neural technologies ensure it learns with every use and builds its own industry-specific knowledge bank that never leaves your organization. Your teams benefit from more accurate and relevant translations every time, without a potential loss of IP. It's an essential tool for any life sciences organization wanting to manage its R&D clinical trials on a truly global scale.

Discover the potential of implementing Language Weaver across your entire operations, and how it can rapidly accelerate your teams' time to impact by visiting our dedicated landing page.

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About RWS

RWS Holdings plc is a unique, world-leading provider of technology-enabled language, content and intellectual property services. Through content transformation and multilingual data analysis, our combination of AI-enabled technology and human expertise helps our clients to grow by ensuring they are understood anywhere, in any language.

Our purpose is unlocking global understanding. By combining cultural understanding, client understanding and technical understanding, our services and technology assist our clients to acquire and retain customers, deliver engaging user experiences, maintain compliance and gain actionable insights into their data and content.

Over the past 20 years we've been evolving our own AI solutions as well as helping clients to explore, build and use multilingual AI applications. With 45+ AI-related patents and more than 100 peer-reviewed papers, we have the experience and expertise to support clients on their AI journey.

We work with over 80% of the world's top 100 brands, more than three-quarters of Fortune's 20 'Most Admired Companies' and almost all of the top pharmaceutical companies, investment banks, law firms and patent filers. Our client base spans Europe, Asia Pacific, Africa and North and South America. Our 65+ global locations across five continents service clients in the automotive, chemical, financial, legal, medical, pharmaceutical, technology and telecommunications sectors.

Founded in 1958, RWS is headquartered in the UK and publicly listed on AIM, the London Stock Exchange regulated market (RWS.L).

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