

22 Mar 2023 | Interviews

# The ChatGPT Revolution Comes To Pharma Business, Starting With Medical Congresses

*ZoomRx Has Tweaked ChatGPT For Pharma*

by Andrew McConaghie

ChatGPT's ability to perform sophisticated analysis and writing tasks has taken the world by storm, and now one developer has launched its own AI aimed at revolutionizing pharma's business intelligence functions.

As excitement around ChatGPT and other generative AI programs grows, one company, ZoomRx, has launched its own tool to help transform how pharma analyzes data coming out of medical congresses.

In recent months OpenAI's ChatGPT has wowed the world by generating sophisticated written responses to questions on global warming or requests to write a sonnet in the style of Shakespeare, and Google has now launched its rival, Bard AI chatbot.

US-based ZoomRx has used ChatGPT to develop its own Ferma.AI program to understand and analyze biopharma data sources, and has made a free-to-all version available on its website <https://aacr23.ferma.ai/#/chat>, ahead of the American Association for Cancer Research (AACR) annual congress, which takes place 14-19 April in Orlando, FL.

The FermaGPT AACR application can search all the 8,230 abstracts submitted to the congress to answer specific text-based questions such as "List abstracts about KRAS and NSCLC" and "Summarize key discussions around racial disparities in prostate cancer."

The company has fed into the prototype version a range of pharma data sources, including [clinicaltrials.gov](https://clinicaltrials.gov), pharma and biotech earnings calls, in order to enrich its text-based outputs. It believes it is the first to launch an AI platform for medical conference coverage, and the first to

launch a GPT-powered tool to analyze conference abstracts.

It also believes the tech can revolutionize congress monitoring for medical affairs, competitive intelligence, and business development teams, just as AI is being increasingly used to accelerate biopharma R&D.

The pharma business consultancy already has a number of big pharma clients, which it charges for access to the full version of the technology. The ZoomRx team did not want to name names when it comes to their existing pharma clients, but their wider business services roster includes companies such as [Amgen](#), [AstraZeneca](#), [Biogen](#) and [Merck & Co.](#)

The company had been working on its Ferma.AI product for five years, but saw the opportunity to merge its platform with the large language model ChatGPT, paying a fee to developers OpenAI to access its software.



SRIRAM SUBRAMANIAN

Sriram Subramanian, ZoomRx's co-founder and co-CEO said early 2023 felt like a "transformative moment" in AI's role in the world, and in life sciences. "People are going to be much more empowered by having the information in an accessible way through large language models in general," he said. "It doesn't have to be ChatGPT, there's a tremendous amount of simultaneous progress going on right now."

Subramanian said that competitive intelligence teams have a clear internal mandate to make senior leadership as well informed as quickly as possible, but currently must sift huge amounts of data manually.

"Let's say you are [Novartis](#), you'll want to know what abstracts Pfizer has at a congress. Right now, that workflow is very bad, once these abstracts get released it takes companies three to four days to just navigate and understand what's going on."

He said generative AI can transform this process, and envisaged the technology becoming like a "co-pilot" to help professionals do their job, freeing them up to focus on more strategic work.

## Getting Generative AI Right For Pharma

Vivek Mathivanan, associate director at Ferma.AI, said it had spent a lot of time fine-tuning the algorithm to give appropriate and, above all, accurate answers. A key component of this approach is its knowledge graph which brings together pharma-specific data sources and allows

clients to train the AI to understand terminology and key conceptual relationships.

Another is the citation engine, which ensures that Ferma.AI's answers all come with a citation of sources, so that they can be double-checked as necessary.

Finally, as accuracy is paramount, ZoomRx has tweaked the ChatGPT-4 to make it less "creative" and more conservative – which includes admitting when it does not have an answer. "In other domains, generative AI can write poetry in the style of a Shakespearian sonnet, and that means it is deeply creative, but not necessarily optimized for accuracy," said Subramanian.

For that reason, Ferma.AI is programmed to lean towards a "don't know" to guarantee a high level of accuracy. Subramanian said pharma's cultural barriers to adopting new technology were likely to be greater than the technical challenges facing developers.

### **A Work In Progress**

The limitations of the AACR version of the software were apparent when *Scrip* asked a few moderately difficult but key questions – "Show me studies with overall survival benefits" and "What are the late-breaking abstracts?" – but returned no answers.

Mathivanan said the program was a work in progress, with the first open access version aimed at answering only a small number of questions well, but with plans for iterative improvements.

The company plans to create FermaGPT public access applications for many more medical conferences this year, including the American Society of Clinical Oncology, the European Society of Medical Oncology and the American Society of Hematology congresses.

It is also working on an upgraded version of the service which will include information from multiple data sources, such as *PubMed*, news press releases, earnings calls and some conference data. Ferma.AI will then produce an output, including citation links which will be a comprehensive summary of a given congress, an upgrade it aims to roll out by April.