



Emerging Value and Pitfalls of Large Language Models in Drug Development

Chairs:

Anzar Abbas, PhD

Amir Kalali, MD

Disclosures

Anzar Abbas:

Employee, hold shares in Brooklyn Health

Amir Kalali:

Co-Chairman, Digital Trials and Research Alliance (DTRA)

Founding Chairman of the International Society of CNS Drug Development (ISCDD)

Chairman and Chief Curator of CNS Summit

Advisor to Brooklyn Health

Today's agenda

Emerging value and pitfalls of LLMs in drug development

- 9:10 **Introduction to session**, Anzar Abbas and Amir Kalali
- 9:30 **Use of LLMs for oversight in a Ph3 program**, Todd Solomon
- 10:00 **Automated monitoring of dosing sessions using LLMs**, Atul Mahableshwarkar
- 10:30 Break!
- 10:45 **Novel methods to quantify changes in schizophrenia symptoms**, Jeff Cochran
- 11:15 **Application of AI/ML in drug development and regulation**, Ruihao Huang
- 11:30 **Panel discussion**, including Valentina Mantua



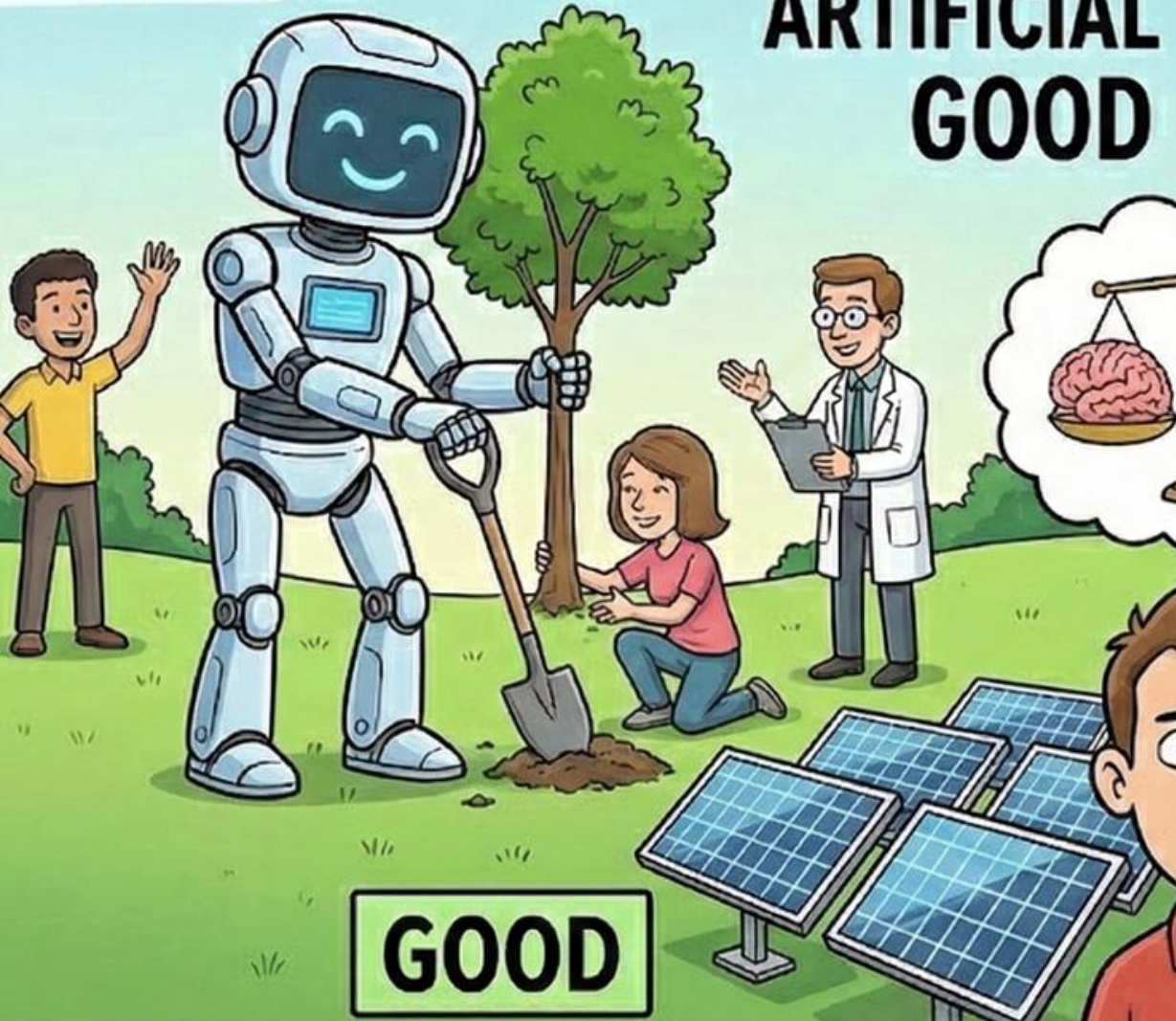
Artificial Intelligence: Good or Bad?

Amir Kalali, MD

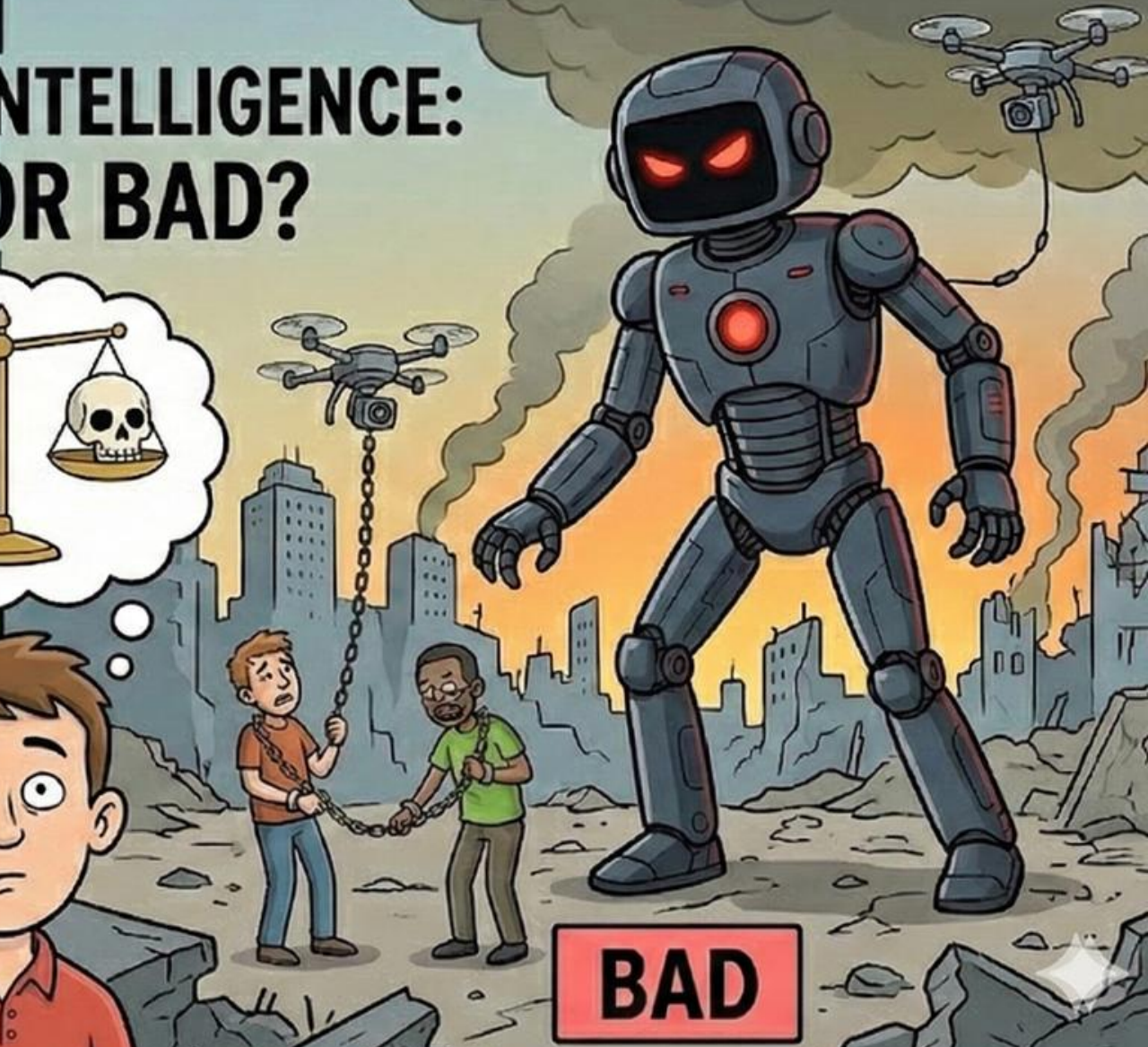
AI: A BETTER FUTURE, TOGETHER!

AI: THE END OF HUMANITY?

ARTIFICIAL INTELLIGENCE: GOOD OR BAD?



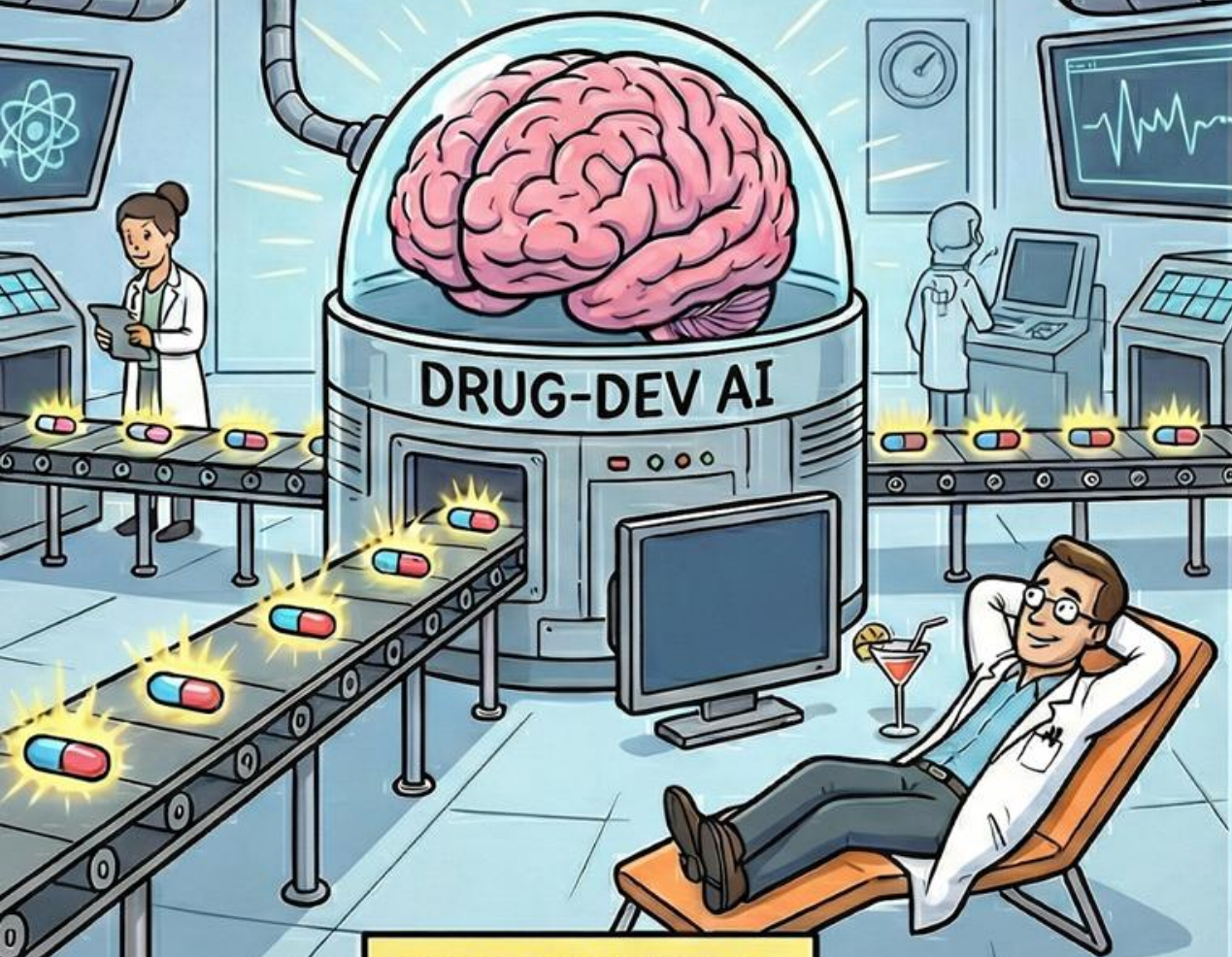
GOOD



BAD

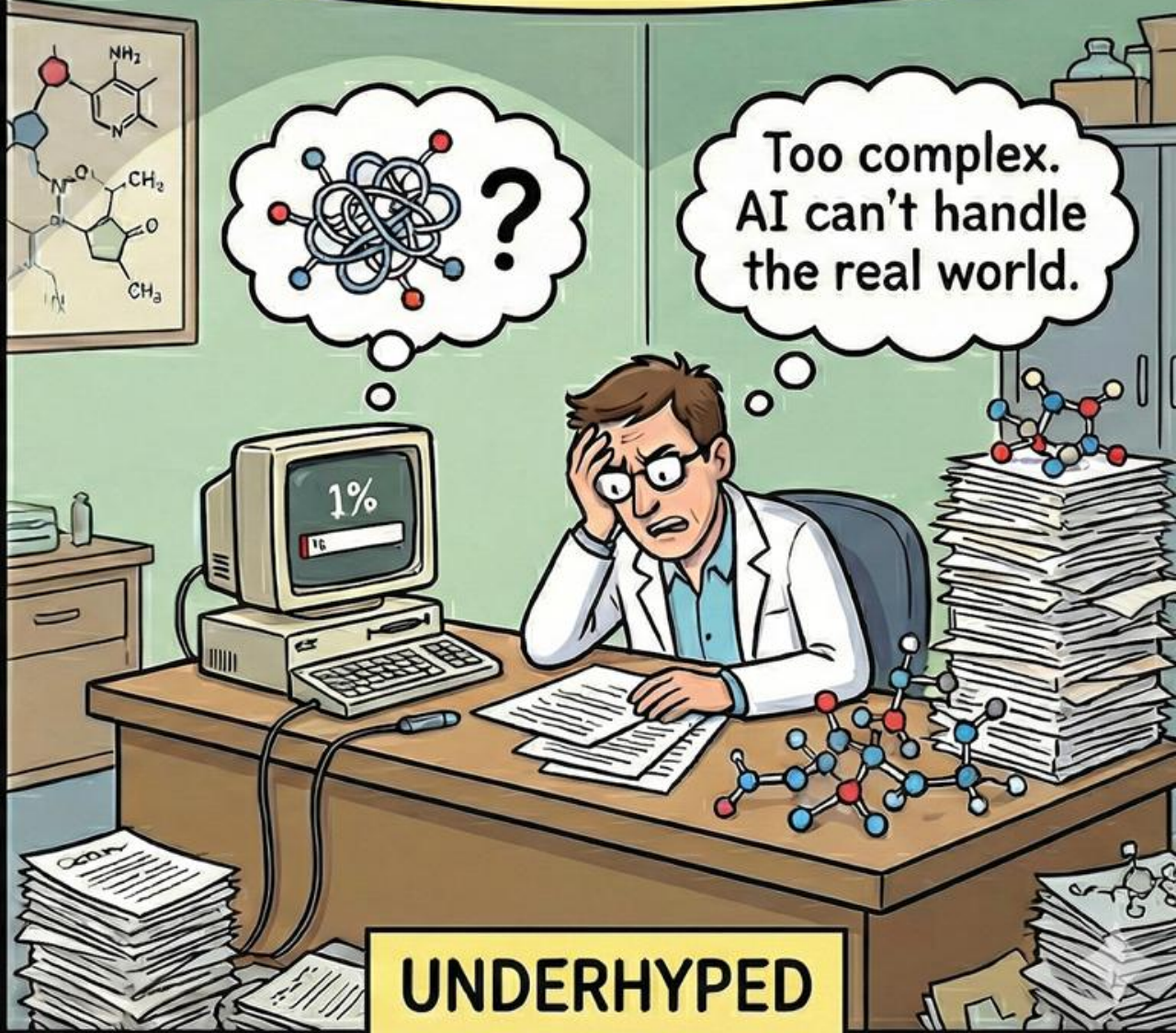
We are in the over-hyped *and* under-hyped stage

BETTER MOLECULES, FASTER TIMELINES, LESS PEOPLE



OVERHYPED

AI? DRUG DEVELOPMENT IS TOO COMPLEX.



UNDERHYPED

Dueling visions of the future



Something Big Is Happening



Matt Shumer ✓
@mattshumer_ · Feb 10

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114K

84M



Think back to February 2020.

If you were paying close attention, you might have noticed a few people talking about a virus spreading overseas. But most of us weren't paying close attention. The stock market was doing great, your kids were in school, you were going to restaurants and shaking hands and planning trips. If someone told you they were stockpiling toilet paper you would have thought they'd been spending too much time on a weird corner of the internet. Then, over the course of about three weeks, the entire world changed. Your office closed, your kids came home, and life rearranged itself into something you wouldn't have believed if you'd described it to yourself a month earlier.

About that Matt Shumer post that has nearly 50 million views

Something big is allegedly happening



GARY MARCUS
FEB 11, 2026

556

216

61

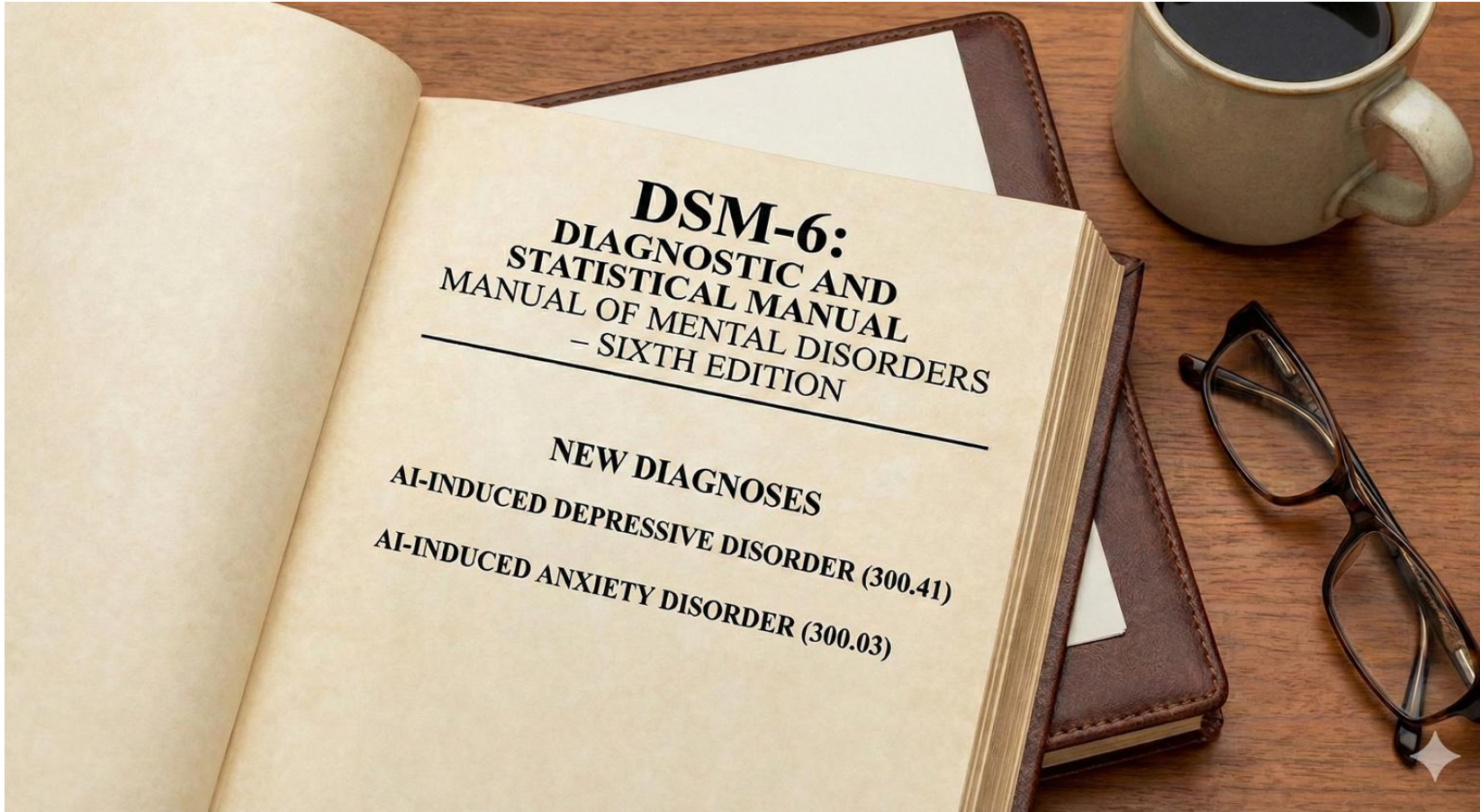
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All morning people have been asking me about [a blog post by Matt Shumer](#) that has gone viral, with nearly 50 million views on X.

It's a masterpiece of hype, written in the style of the old direct marketing campaigns, with bold-faced call outs like "I know this is real because it happened to me first" and "I am no longer needed for the actual technical work of my job". It's chock full of singularity vibes:

corrections needed. A couple of months ago, I was going back and forth with the AI, guiding it, making edits. Now I just describe the outcome and leave.

Let me give you an example so you can understand what this actually looks like in practice. I'll tell the AI: "I want to build this app. Here's what it should do, here's roughly what it should look like. Figure out the user flow, the design, all of it." And it does. It writes tens of thousands of lines of code. Then, and this is the part that would have been unthinkable a year ago, it **opens the app itself**. It clicks through the buttons. It tests the



Be honest

How many of you actually use AI regularly?

How many use it regularly for work?

How many personally pay the paid tier?

How many pay for the \$200 plus level?

How many have developed a custom GPT or AI assistant?

How many of you think AI is over-hyped right now?

How many of you think AI is under-hyped right now?

How many of you think AI will dramatically change how we conduct drug development?

How many of you think it does not matter as the world is ending anyway?

What has been the pace of change in the last few decades?



We are used to glacial speed of change, through many waves of “innovation”.

This time maybe, *just maybe*, is different

The best way for you to assess these questions is actually to work with the most advanced models, as they are improving exponentially.

Working with the models is the best way to realize their limitations and pitfalls.

As a clinical trial expert, you will see the limitations and be wary of the hype.

No one can afford to sit this one out.