

AI In Clinical Research

Transforming Today, Shaping Tomorrow

Ramy Nassar | Signant Health

We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run.

– Roy Amara (Amara's Law)

Thinking about the future of clinical trials

As technology accelerates, what's a bold "What if?" question that we should be asking — but aren't?

What if we get left behind?

What if we are exposed and what can we do to protect ourselves?

What if it misleads us

The industry went completely paperless

How many platforms are too much?

What if AI could find a cure for all terminal diseases?

How much are we unconsciously be influenced in a wrong way

What if we fall behind?

As technology accelerates, what's a bold "What if?" question that we should be asking — but aren't?

What if all trials can be simulated and eliminate most need to patient volunteers and research site

What if regulators do not catch up with technological advances?

What if we thought less about risk and more about benefit?

What can I do to not become dispensable?

What if what we do becomes irrelevant

What if we can provide care to everyone on the planet and cure diseases we never thought possible

Are humans actually able to keep up with the speed and maintain our mental health ?

Do we have enough energy to keep AI serves before the quantica chips are real?

Thinking about the future of clinical trials

As technology accelerates, what's a bold "What if?" question that we should be asking — but aren't?

What if the sponsor believes that a bot can relocate a person?

What if AI could be used to automatically enter all info from a protocol into the CTMS system?

What if our data gets breached

What if the problem with clinical trials isn't the creation of technology but the adoption of it?

What if we get to a point when there is no more information to learn?

With all data we have why do we need placebo arms today?

Will AI take over doctors responsibilities in diagnosis and treatment plans.

Will the lack of quickly adapting this put us out of business

As technology accelerates, what's a bold "What if?" question that we should be asking — but aren't?

What if we become overly reliant on a system without a double check, 30 years from now?

What if we will not do this? What would be the impact?

Impact on the role of work for human fulfillment for an average person

What if we figure out a way to work together, and streamline processes? Several of us do the same thing but not necessarily what's best for patients

Will we give AI the license to consume all the data it can to help us solve the medical problems we have caused ourselves?

What if we over-rely on tech and lose the human component?

What if we could make all technologies integrated

What if one AI tries to destroy another AI?

Thinking about the future of clinical trials

As technology accelerates, what's a bold "What if?" question that we should be asking — but aren't?

What if we could cure cancer

What if AI fails us by no longer allowing humans to think for themselves?

What if AI can predict diseases we don't even know about yet?

What if we take too much humanity out

What if we are too reliant on objective data without considering the subjective impact.

A hand is holding a pair of glasses. The lens of the glasses shows a forest scene with trees and a path. The text is overlaid on the image.

The future is already here – it's just not
evenly distributed.

– William Gibson

The Shifting Landscape

- AI is no longer just for experts — it's in everyone's hands
- AI is gaining agency — not just answering
- AI can reason & create — but who's responsible when it gets things wrong?

Today's AI Tool Landscape

- ChatGPT
- Claude
- DeepSeek & Manus
- Perplexity
- Copilot & Gemini
- Cursor & other task-specific tools



What if we could decode complex protocols, reduce site burden, and drive more inclusive, efficient trials — then maybe the future of clinical research isn't just powered by tech. It's powered by the trust and transformation of site professionals.

– CEO, Large Research Site Network

//
AI doesn't have a conscience, but we do. It's our job to ensure that AI is developed and deployed ethically to avoid reinforcing harmful biases.

– Fei-Fei Li



1000
DAYS OUT

Prompt Like a Pro

8 Ways to save time & look really really smart!



Taking the Next Steps (or giant leap)

- AI can reduce site & patient burden today
- (Safely) take baby steps & validate use cases
- Don't wait 2 more years for me to come back :)