



AI at Scale in Drug Development:

Fighting the Odds to Accelerate Breakthroughs to Patients

Kim Hawkins
Global Head of Clinical Project Operations, Sanofi

We set ourselves bold ambitions

Digital Tomorrow

Horizon 2030

Stronger Together, we aspire to ...



Enable to **halve the time** from discovery to therapy while increasing probability of success



Become the **first bio pharma** company powered by **artificial intelligence at scale**



Our purpose is to deliver **best-in-class and first-in-class** science faster to the patients

Development timelines @ Sanofi: 8.9 years

1-year faster than Industry median



Translational Medicine: Harnessing Clinical Trial data along with Real World Data

Saving up to 2 years with in silico trials

Integrated evidence generation to help develop patient-centered drug development strategies

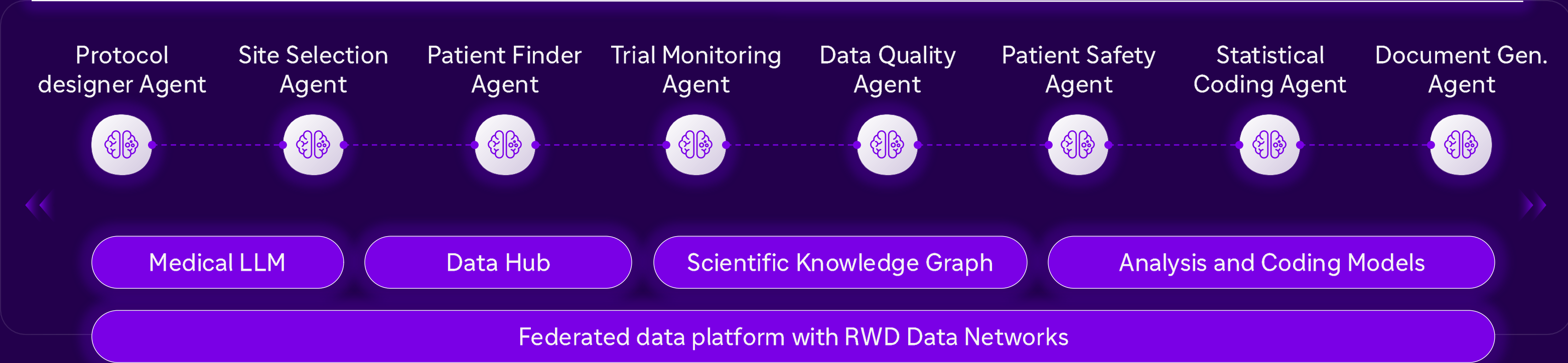
Translation



Digital study platform

Break the codes to disrupt a traditionally slow & inefficient process

Protocol Development > Study Planning > Study Conduct > Analysis & Reporting > Submissions > Post Approval



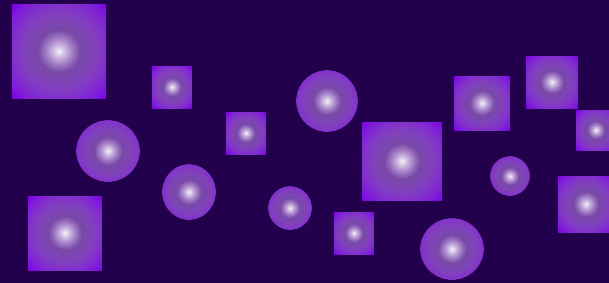
Protocol Optimization and Digitalization Downstream



Study design & protocol characteristics

- Clinical trials that better match routine medical care
- Reduced patient burden
- Use of local healthcare network
- Patient-centered endpoints
- Disease-specific patient support

Build smarter, patient centric protocols with endpoints patients care most about



Automated protocol & downstream documents

- Auto-generation of protocol
- Downstream generation of documents, case report forms, edit checks, medical/patient review, study report shells, etc.

Reduce time and costs in downstream activities to move novel medicines to patients faster

Patient Finder Agent : Muse

2 months / study accelerated

On patient recruitment with AI-generated omnichannel strategies that target unmet needs in diverse patient populations



How we did it?

Tripartite partnership with OpenAI and Formation Bio to develop a patient recruitment Product with capabilities to generate Patient-Facing material

Problems

Suboptimal patient recruitment strategy

Limited recruitment approach to diverse populations

Recruitment delays on priority trials

Patient data review, data validation & Safety Signal Detection



Before

Complex & Manual



Now

Centralized & Automated

+ 20%

in Periodic Monitoring
Visit productivity



- 50%

Source data verification
& coordination activities



- 33%

In Medical review cycle time
planned



***From 4
to 2 weeks***
for DataBase Lock



Identification and review of potential safety signals for development and post-marketing products

Real-time signal detection capabilities

Rapid Epidemiology

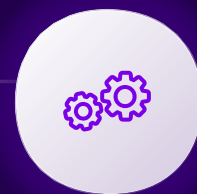
Predictive signal dispositions

Document Gen. Agent (CSR)



*From 17 weeks
to 5 weeks*

Leverage GenAI technology to generate the first draft of Clinical Study Reports (CSR), reducing the process duration from database lock to final CSR

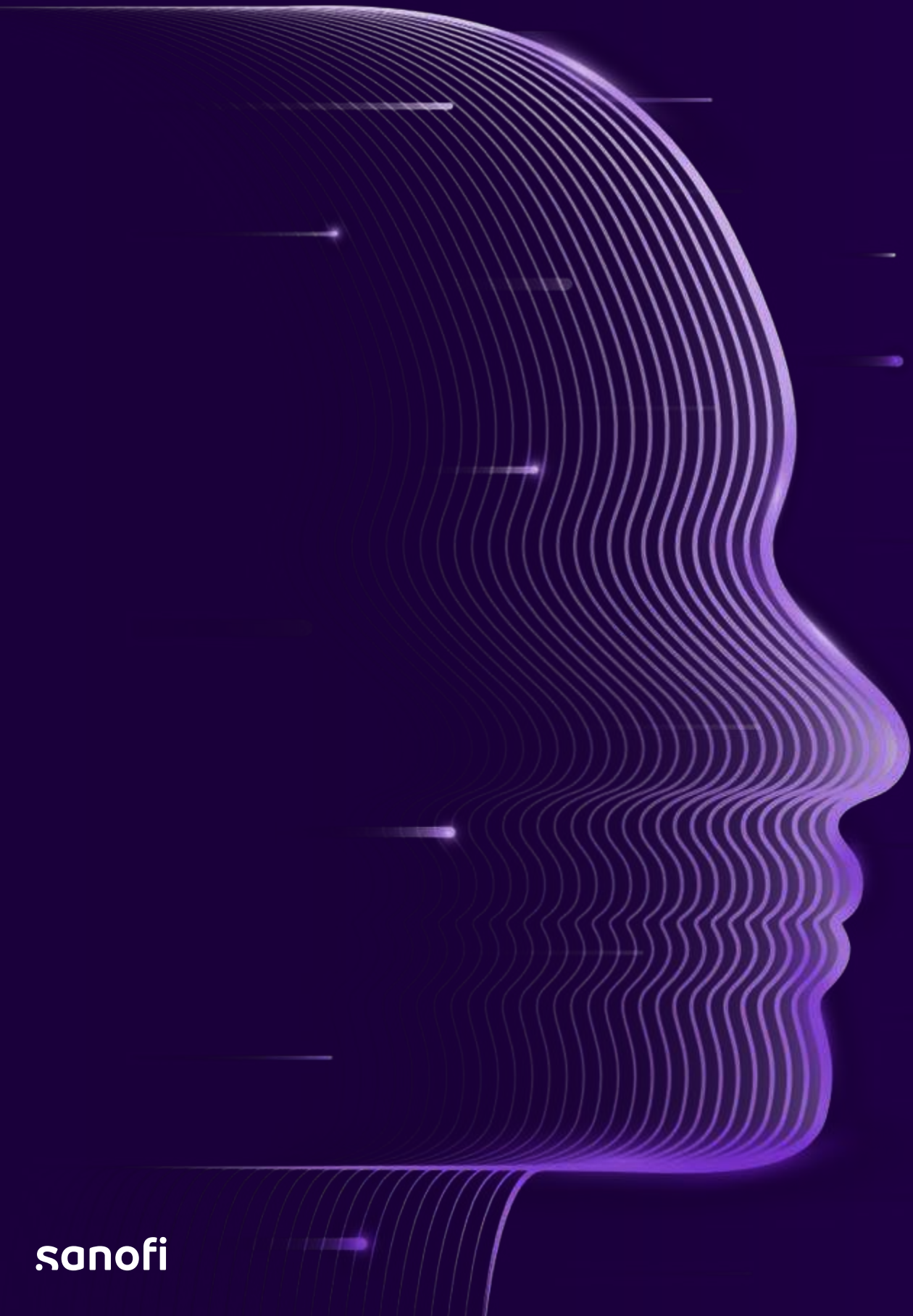


60%

Writing time efficiencies



*Reusable assets across
R&D & M&S for
document creation*



AI won't
replace humans

*But human with AI will
replace humans without AI*