

ABSTRACT TEMPLATE: CHECKLIST AND INSTRUCTIONS

Company name-----CytoReason----- * Website-----www.cytoreason.com-----

Chief Scientist, Shai Shen-Orr -----*

CATEGORY: Biotech/Pharma

SESSION: AI Meets Pharma; Building a Sustainable Value for Biotech AI innovation in Drug Development

o Executive Summary

Founded in 2016 by Technion Professor Shai Shen-Orr and healthcare executive David Harel, CytoReason develops computational disease models, used by five of the world's top ten pharma companies. The company's AI platform simulates human diseases at the tissue and cell levels, and helps pharma companies improve efficacy success, derisk decision-making, and reduce cost and time of drug development.

o Core Technology

CytoReason's pre-computed disease models leverage molecular and clinical data and generative AI to help pharma executives make faster, smarter decisions – from target prioritization to indication expansion and patient stratification, at scale, across entire drug portfolios. Disease models are accessible to our customers via platform and API.

o Product Profile/Pipeline

In 2022, CytoReason expanded its partnership with Pfizer in a \$90m commercial deal. In 2023, the company expanded its collaboration with Sanofi, licensing its IBD disease model in a multiyear, multimillion-dollar deal. IN 2024, CytoReason signed a Series B investment, with NVIDIA and Thermo Fischer. CytoReason recently signed two additional collaborations, with top 15 pharma companies, to inform key portfolio decisions related to multiple indications.

o Business Strategy

Core business model is sales of the disease model platform to the drug industry. The computational disease models are sold as the main part of the platform, and the platform performs specific use cases, such as target, indication and subpopulation prioritization. These are directly embedded into the drug R&D workflow.

o What's Next?

Following a successful \$80M Series B raise, including adding NVIDIA as an investor, CytoReason is integrating GenAI and Agentic AI technologies into its platform roadmap to expand the scale of supported diseases, therapeutic areas and data types. As industry recognition of the need for intelligent data use at scale, CytoReason is poised to help our customers make more accurate predictions and ultimately scale their AI-led drug development programs.