

Revolutionizing the way we discover drugs by understanding complex biology

Dr. eng. Kinga Matuła CEO

Market pull

Lack of understanding of complex biology







Ibrutinib: B cell cancer malignancy treatment

"We need a technology that will allow us to **look inside the cells** and see in **high-resolution** what is happening

Drug development: slower and more expensive



Eroom's law



Al-powered drug development



Our solution: high-resolution maps of cellular responses

Underground network



Cellular network



QuRIE-seq quantifies intracellular interactions



Patent-pending, know-how + trade secrets

Protein Detected protein – changed level Detected protein

Value to pharma companies



Understanding of cellular 🖡 urie Gen 🤅 10x more insights response than 1 year of work by an internal R&D team at a lower cost and less time See ISOP 100

Number of proteins

Pharma case studies



One-stop service for pharma companies

QuRIE-seq platform (TRL 6/7) + data analysis



De-risk and accelerate drug development

- Find new drug targets/ combinations
- Select lead compounds
- Identify unwanted toxicity and nonresponsive cells sooner
- Detect potential reasons for failing
- Identify off-target effects
- Detect a resistant subset of cells

Business model: two sub-models



Big discoveries using Al



Selection of "winner" drug



Drug repurposing



Development of new drugs (our IP)





Project size



Al-driven drug discovery



Stimulus

Observed network response in patient cells

HIDDEN LAYER of protein and mRNA networks (KEGG database +...+ QurieGen Database)

Desired network response of healthy cells

Network response

Cell-type specific

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Follow changes in time

The pattern of changes is modulated by drug molecules



Business model: dual revenue stream





The industrial revolution of drug discovery



- Data mining
- Prediction of new targets
- Al-driven development: CAGR of 42.3%



Valuation: \$3.5B

Benevolent

Valuation: \$1B

insitro

Investment: \$400M



Investment: \$123M





Sold: \$85M (5 years after founding)

Exscientia: six molecules entered clinical stage



Exscientia announced First AI-Designed Immuno-Oncology Drug to Enter Clinical Trials

"(...) Where it might have taken the traditional discovery process **4–5 years to come up with the drug candidate** - an A2 receptor antagonist designed to help T cells fight solid tumors - it was found in **8 months** by harnessing Exscientia's 'Centaur Chemist' AI design platform." (1)

Pipeline



Core team





Dr. eng. Kinga Matuła CEO, co-founder

Prof. dr. Wilhelm Huck **Scientific Advisor**

Biotechnologist, Chemist Single-cell expert Serial entrepreneur

>13 years of research

Spinoza Prize and Groeifonds Winner (€100M)

>30 years of research



Jasper Levink, ir Business & Strategy, Board Member

Serial entrepreneur Expertise in spin-outs and scale-ups

> >13 years of business experience







Dr. Hans van Eenennaam **Business and Scientific Advisor**

Dr. Paul Vink **Research Advisor**

Head of AI team R&D

Biochemist, Immunologist Serial entrepreneur Co-inventor of 5 drugs (i.a. Keytruda),

>30 years of experience in pharma R&D

(Onco)Immunologist Co-inventor of 4 drugs

Discussions in progress proven track record in pharma Al-driven drug discovery

in pharma R&D

>30 years of experience

venture Venture Challenge challenge Winner 2022



Draper's Silicon Prize Winner 2022



2nd place Demo Day by Tim Draper 2022



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