The solution

100 rare disease treatments towards the clinic by 2025

Develop treatments for rare diseases by using repurposing:

AI-powered drug repurposing

3-5 years

$50m

25%

Conventional drug discovery

12-14 years

$2-3bn

5%

Millions of rare disease patients will have an approved treatment for the first time

References: Luo S et al. (2013) Drug Repurposing: The New R&D. Rare Disease Review. Schuhmacher A et al. (2014) Changing R&D Models in Research-Based Pharmaceutical Companies. Journal of Translational Medicine.

healx

Healx knowledge graph

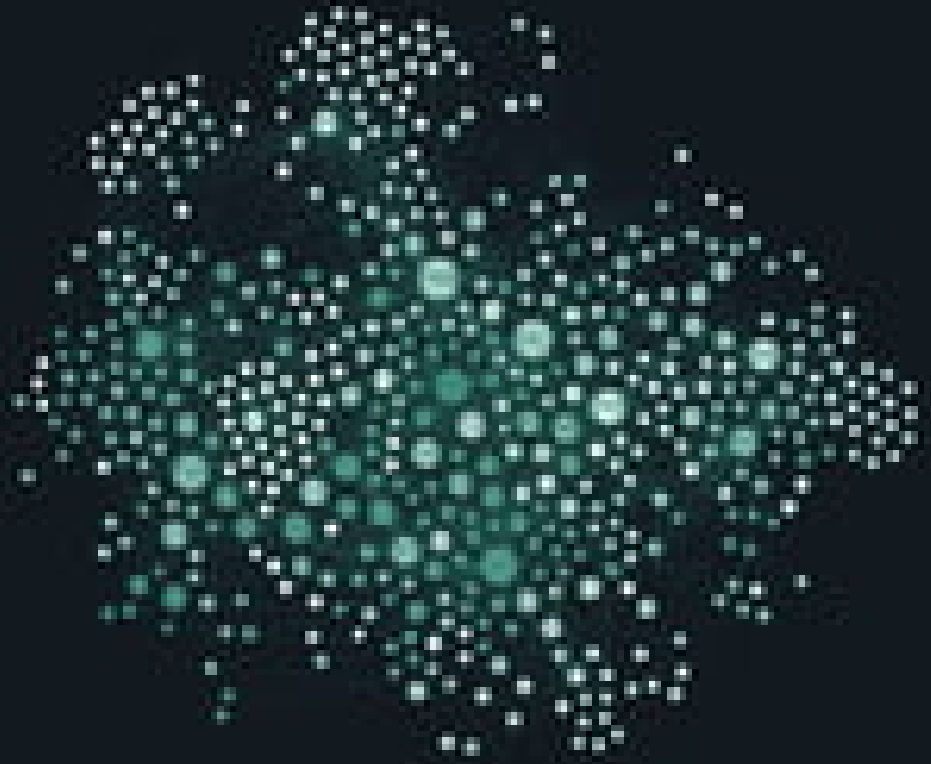
Most comprehensive rare disease knowledge graph

Clinical, biological and pharmacological information informs and undergoes AI treatment discovery.

Integration of public / private databases with proprietary data

A billion relationships inform treatment discovery

Highly curated data



healx


healx

healx

Accelerating treatments for rare diseases

AI-powered, patient-inspired

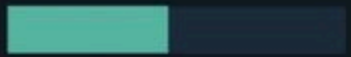
The problem

Rare disease patients

7,000 rare diseases

400m patients worldwide

50% are children

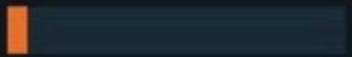


Pharma companies rely on blockbuster drugs

R&D costs $2-3bn

Takes 12-14 years

Success rate of 5%



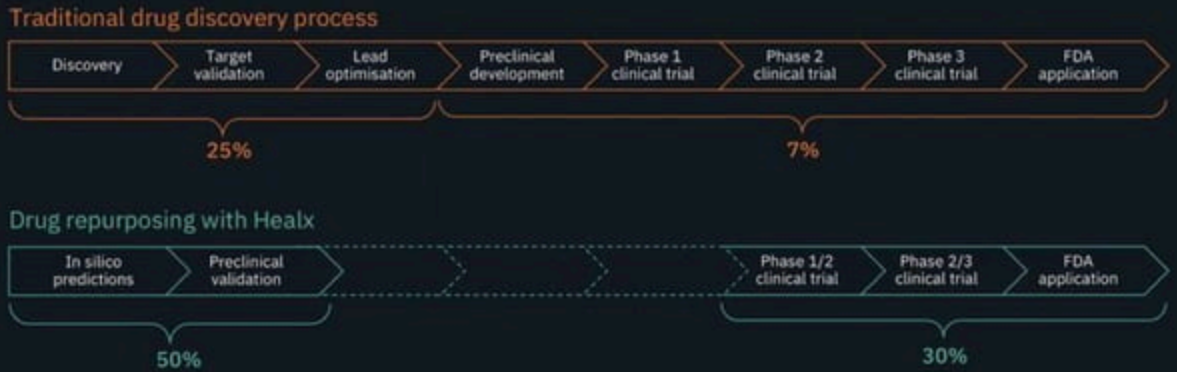
95% of rare diseases don't have an approved treatment

healx

AI-powered biotech

Healx repurposes and combines existing drugs using AI to find novel rare disease treatments at scale

Healx redefines and de-risks drug discovery



Healx therapeutic pipeline has 10-fold lower attrition rate

Brown, D et al., Drug Discovery Today, 8, (23) 106-1077 (Dec 2003)

healx

The solution

100 rare disease treatments towards the clinic by 2025

Develop treatments for rare diseases by using repurposing:

Millions of rare disease patients will have an approved treatment for the first time

References: Lin S et al. (2017) Drug Repurposing: The New R&D. Rare Disease Review. Schuhmacher A et al. (2016) Changing R&D Models in Research-Based Pharmaceutical Companies. Journal of Translational Medicine.

healx

Healx knowledge graph

Most comprehensive rare disease knowledge graph:

Clinical, biological and pharmacological information informs and underpins AI treatment discovery.

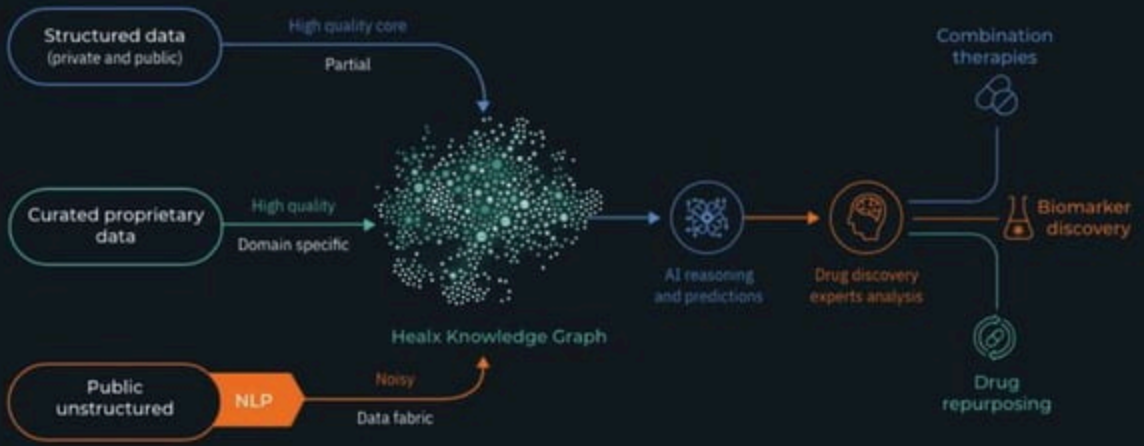
Integration of public / private databases with proprietary data

A billion relationships inform treatment discovery

Highly-curated data

healx

Healnet: from data to drugs



healx

Current projects

Leadership team

Kate Hilyard, PhD
Chief Operating Officer
Senior discovery leadership roles in CRL, Cambridge Antibody Technology and Roche

Over 25 years' drug discovery experience, 10 years' rare disease experience

Tim Guilliams, PhD
Co-founder, Chief Executive
Founding Director, Trustee, Cambridge Rare Disease Network

Cambridge University Graduate

PhD in Biophysics

Neil Thompson, PhD
Chief Scientific Officer
Former SVP of Biology at Astex with over 30 years' drug discovery experience

Progressed more than 10 drugs into patients across a variety of therapeutic areas

Ian Roberts, PhD
Chief Technology Officer
Tech leadership roles in multiple genomics biotech startups

Over 20 years' experience in genomic technologies, strong background in rare cancers

Andrea Pierleoni, PhD
Head of AI
Strong background in NLP, full-stack dev & knowledge graph reasoning

Lead back end architect, Open Targets

PhD in computational biology

Bruce Bloom
Chief Collaboration Officer
Founder, CEO and CSO of non-profit Cures Within Reach

Extensive patient group and charity partnership involvement and over 40 years' healthcare industry experience

Board of directors

Jonathan Milner

Investor Director

Co-founder, Abcam
Co-founder, Milner Institute for Therapeutics

David Brown

Chairman, Founding Director

Ex-Global Head Drug Discovery, Roche
Co-inventor of Viagra

Suranga Chandratillake

Investor Director

Partner, Balderton Capital
Founder and CEO of Blinkx
Former CTO Autonomy

Shaun Grady

Board Director

Global VP, Business Development Operations, AstraZeneca
Led Medimmune acquisition

Irina Haivas

Board Member

Principal at Atomico
Former strategy consultant at Bain & Co. and growth and PE investor at GHO Capital

Tim Guilliams

Founding Director

Founding Director, Trustee, Cambridge Rare Disease Network
Cambridge University Graduate
PhD in Biophysics


healx