evotec

#RESEARCHNEVERSTOPS

Welcome to Evotec

"Manfred Eigen Campus" in Hamburg

Welcome to Hamburg!

Evotec SE Headquarter

The roots

A red cube?

Site acquired from Eli Lilly in 2012

The people

2012: 185 employees

2023: 760 employees

The focus

CNS diseases

iPSCs

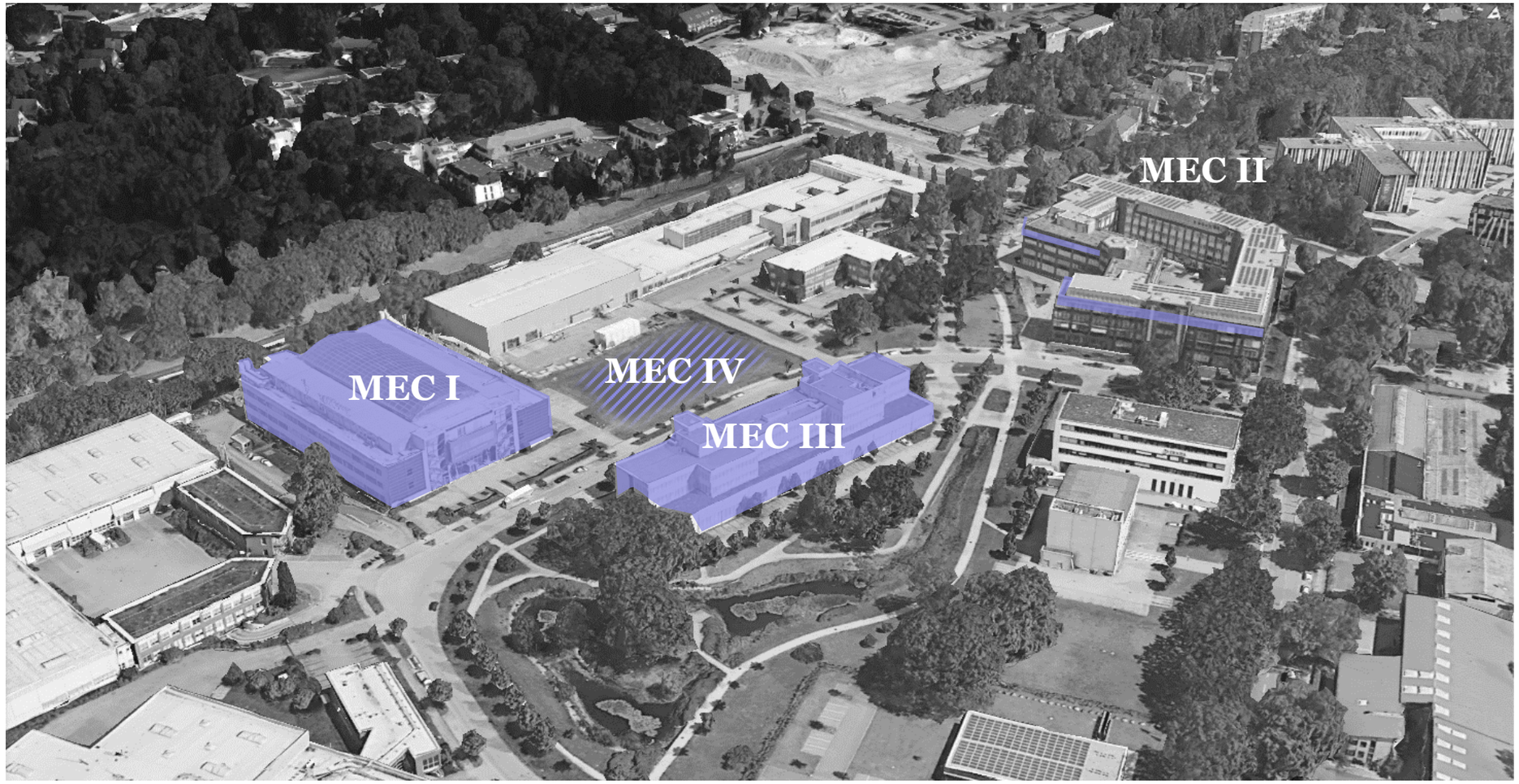
The future

PanOmics

The Lighthouse of iPSCs

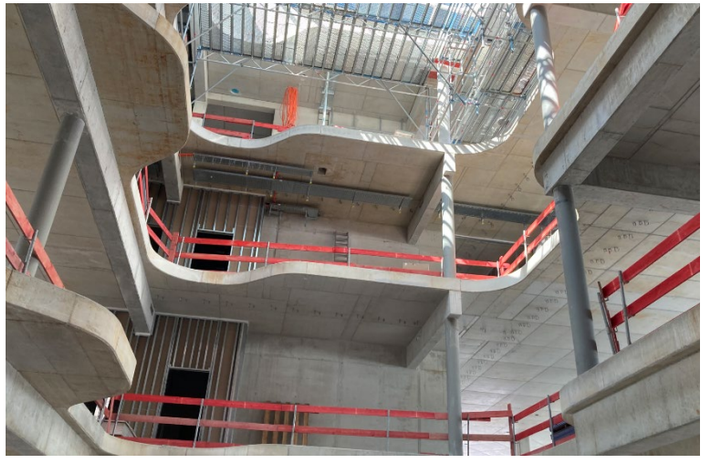
Our home base is growing further

Footprint of Manfred Eigen Campus



The iPSC Lighthouse, coming in 2025

Manfred Eigen Campus IV



Global collaborative model for highest efficiency and precision

Platforms & technologies and network for higher probabilities of success (PoS)

Hamburg (GER – HQ)
Manfred Eigen Campus – A major hub for integrated drug discovery including variety of HTS screening activities; home of neuroscience experts & the basis for leading end-to-end iPSC platform

Göttingen (GER)
Manfred Eigen Campus – home of multi-omics data analysis PanHunter, E.MPD & iPSC-derived cells

Cologne (GER)
Induced pluripotent stem cell (iPSC) technology

Halle (GER)
Centre of excellence for rare disease drug substance manufacturing

Munich (GER)
Dedicated to unrivalled proteomics and bioinformatics; unique mass spectrometry-based “omics” platform

Seattle (US)
Dedicated to biologics

J.POD® Redmond (US)
Biologics development & cGMP commercial manufacturing

Branford site (US)
Dedicated Sample Management Facility

Princeton (US)
Gertrude B. Elion Campus, dedicated to cell & protein production

Framingham (US)
US site of the ADME-Tox capabilities

Alderley Park (UK)
Focused on antimicrobial and infectious disease; Cyprotex – global leader in DMPK/ADME-tox

Abingdon (UK)
Dorothy Crowfoot Hodgkin Campus, integrated drug discovery & development

Toulouse (FR)
Campus Curie – Oncology & immuno-oncology centre of excellence; integrated drug discovery; 2nd J.POD®

Lyon (FR)
Anti-infective drug discovery; BSL 3 laboratory set up

Vienna (AU)
Dedicated to gene therapy

Modena (IT)
Cell therapy manufacturing

Verona (IT)
Campus Levi-Montalcini Integrated drug discovery & development

Your hosts today

Claudia Karnbach
EVP
Global Head of Strategic Partnerships and Alliances, Site Head Evotec SE Hamburg

Werner Lanthaler
CEO

Cord Dohrmann
CSO

Bhushan Bonde
Group Leader
In silico R&D

Sandra Lubitz
SVP
Stem Cell Biology

Christiane Honisch
SVP
Head of Diagnostics

Olivier Radresa
SVP
Head of Nephrology

Andreas Scheel
EVP
Head of Cell Therapy

Christine Günther
Entrepreneur in Residence & Medical Director Cell Therapy

Markus Dangl
EVP
Head of Innovate Oncology

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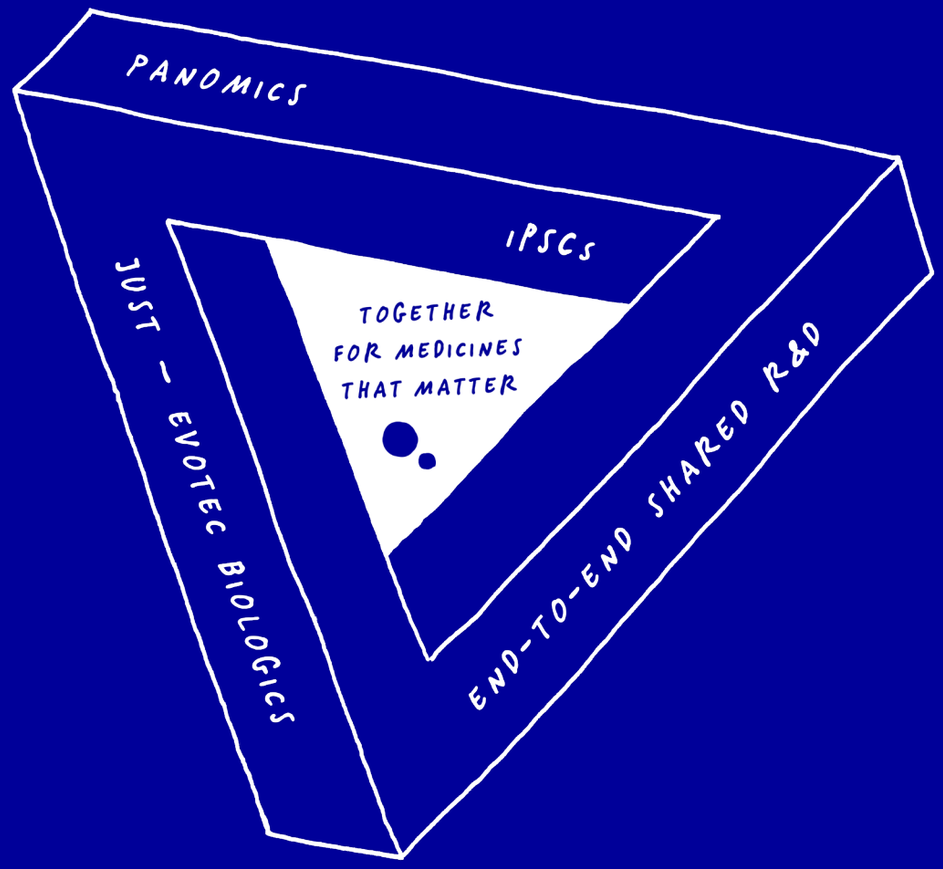
Shaping new Markets

From disease understanding to pipeline building



Agenda

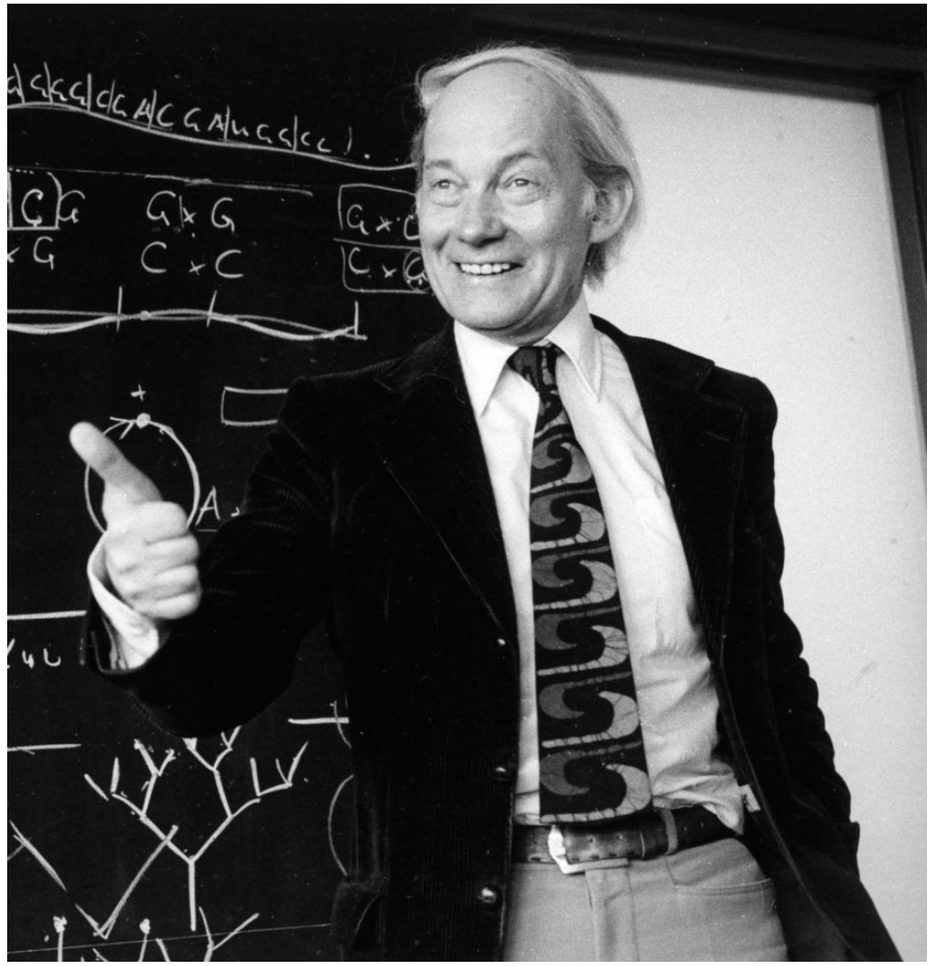
9:00-9:30	Shaping (new) markets
9:30-11:00	PanOmics – From patients for patients
	• *Better disease understanding & diagnostics*
	• *Advanced disease modelling*
	• *A.I. use cases along the value chain*
11:00-11:15	*Coffee Break*
11:15-12:15	Impactful therapies
	• *Integrated platform*
	• *Diabetes*
	• *Oncology*
12:15-13:30	*Lunch Break*
13:30-16:00	Round Tables

Creating the future will work #together

Our contribution to the industry

„The goal of Evolution is not one single human, it is mankind.“

Manfred Eigen (1927–2019)
Co-founder of Evotec, Nobel Prize 1967



Accelerating medicines that matter

About us

4,000++ scientists empowering Partners

Across all disciplines and disease areas from target to commercial manufacturing

Co-creating pipelines

Leveraging our assets, targets or proprietary platforms for licensing, co-development or potential NewCo creation, frequently combining with Partners' programs, and ideas

R&D Biotech that offers accelerated, high-value pipeline-building, services and solutions

Performance - "Beyond FTEs"

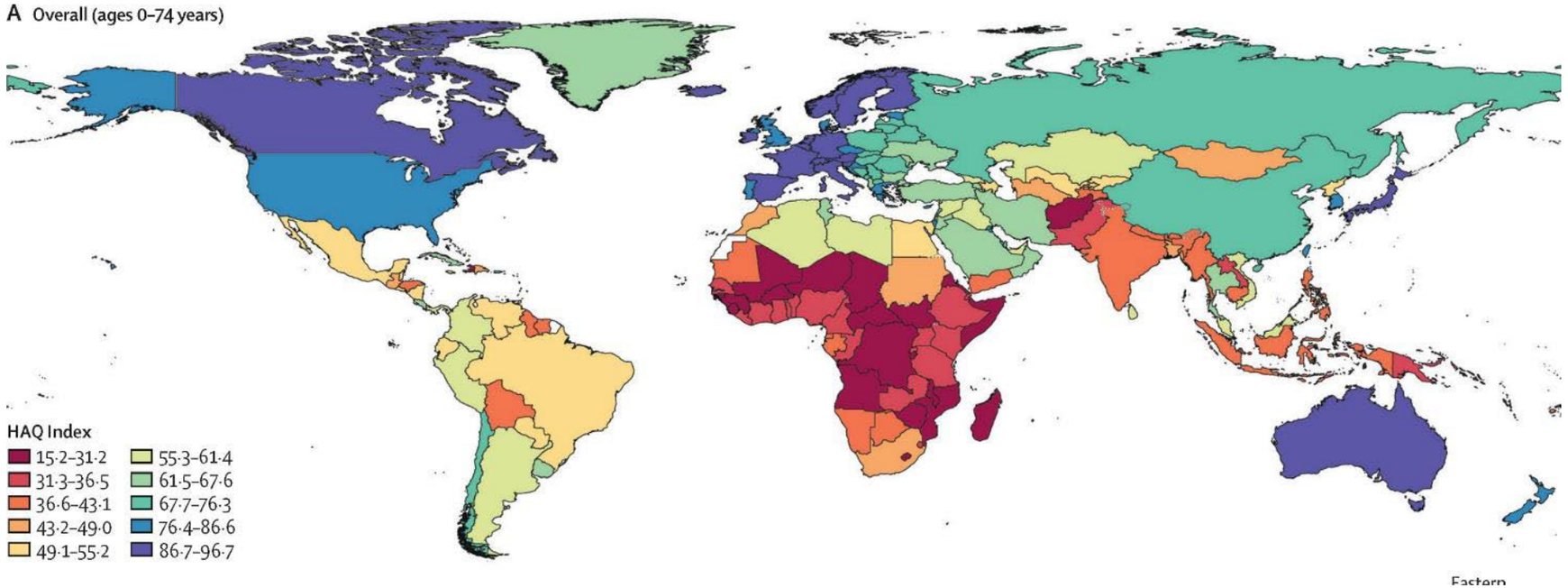
Collaborating with "end in mind", result-driven partnership models

Track record - Highest quality, most capital-efficient execution

State-of-the-art services as core offering for partners

“Just the beginning” of best days in medicine

Health Access and Quality (HAQ) index analysis



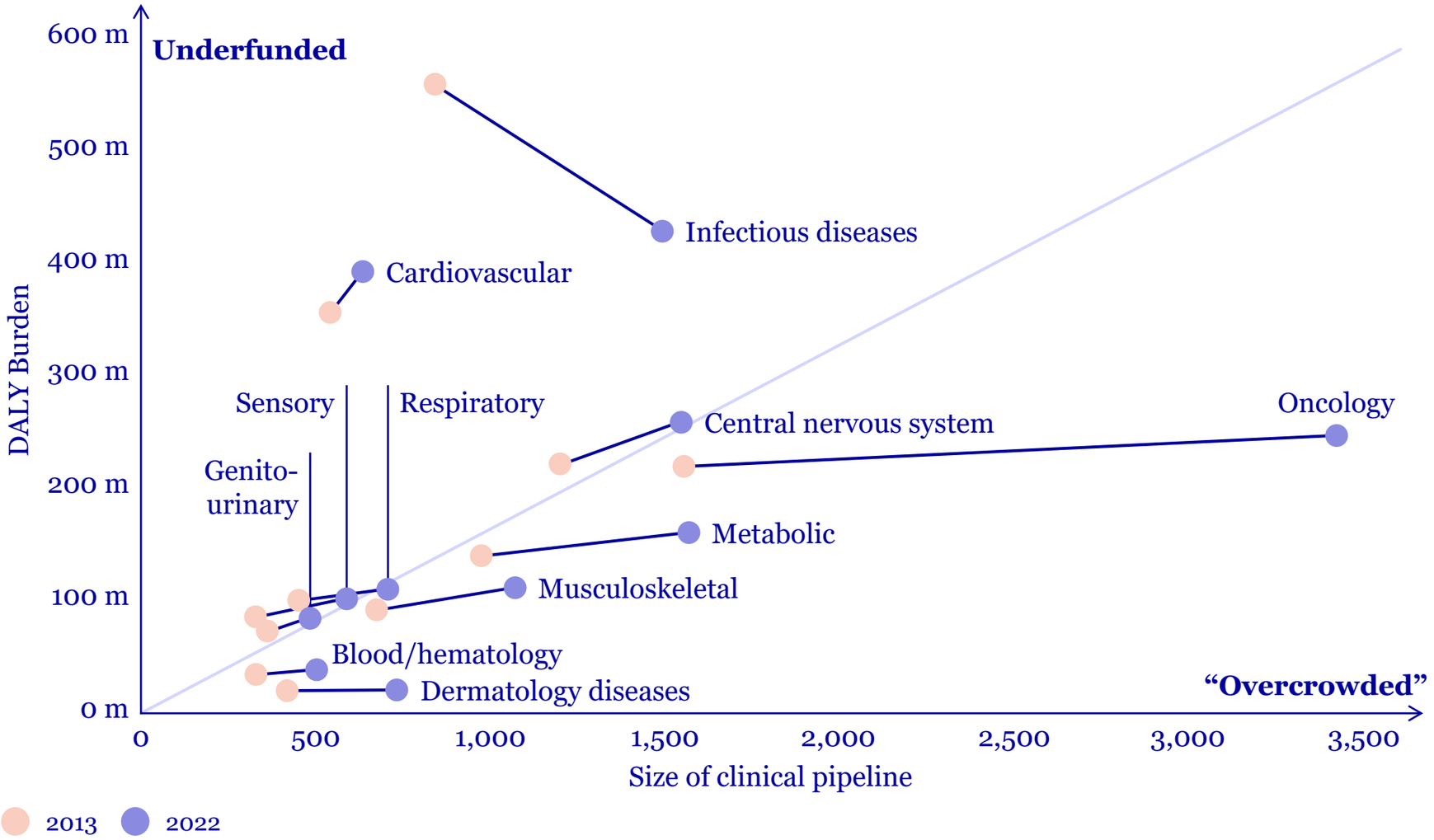
Access to innovative medicine remains a severe unmet need[1,2]

- High-burden diseases in higher-income countries represent **23% of global disease burden**
- High-burden diseases in low and middle-income countries (LMIC) represent **40% of global burden**

Sources:
1 Haakenstad, A., et. al. (2022). Assessing performance of the Healthcare Access and Quality Index, overall and by select age groups, for 204 countries and territories, 1990–2019: a systematic analysis from the Global Burden of Disease Study 2019. *The Lancet Global Health*, [online] 10(12), pp.e1715–e1743. doi:https://doi.org/10.1016/S2214-109X(22)00429-6.
2 Bergen, P. et. al. (2023). *Balancing pharma investment, access and healthier lives*. [online] ZS insights. Available at: https://www.zs.com/insights/zs-research-global-disease-burden-balancing-pharma-investment.

Precise and effective drugs will find markets

Unmet need analysis – DALY Burden versus industry pipelines

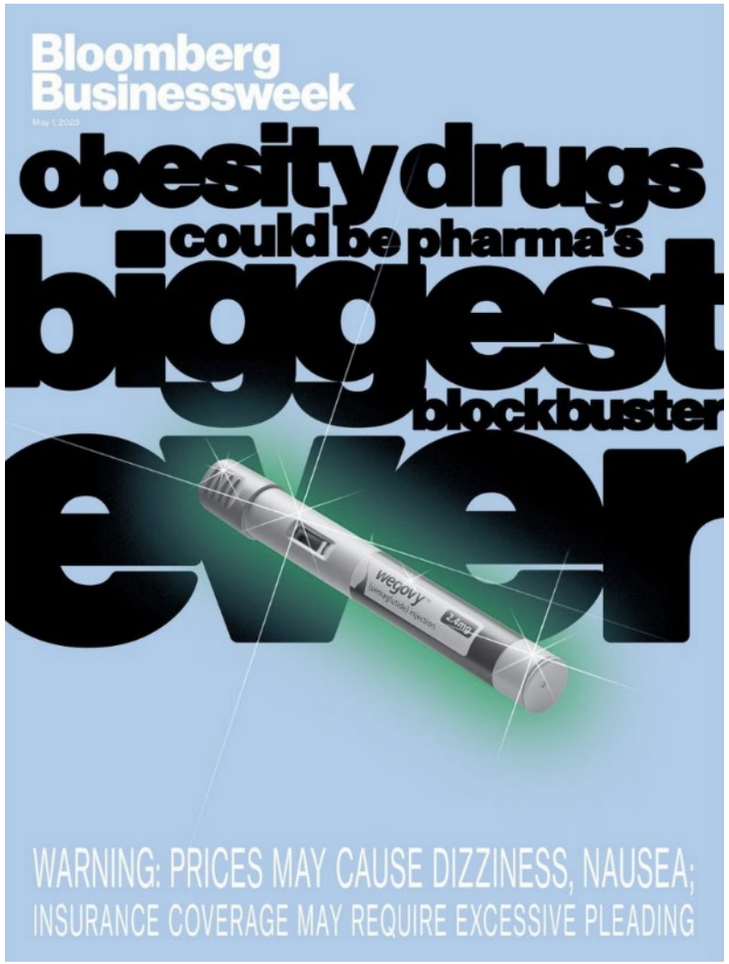


- Demand for differentiation with innovation is expanding
- Revolving change between the industry's priorities and R&D investments

Source: https://invivo.citeline.com/IV146783/The-Misalignment-Of-Pharma-Pipelines

Big innovation is happening, but next challenges around the corner

Case study: Obesity



Illustrative calculation

U.S. Obesity Prevalence[1]

140 million

×

Annual price of new GLP-1 medication[2]

~15,000 USD

Estimated total annual costs to health system[2]

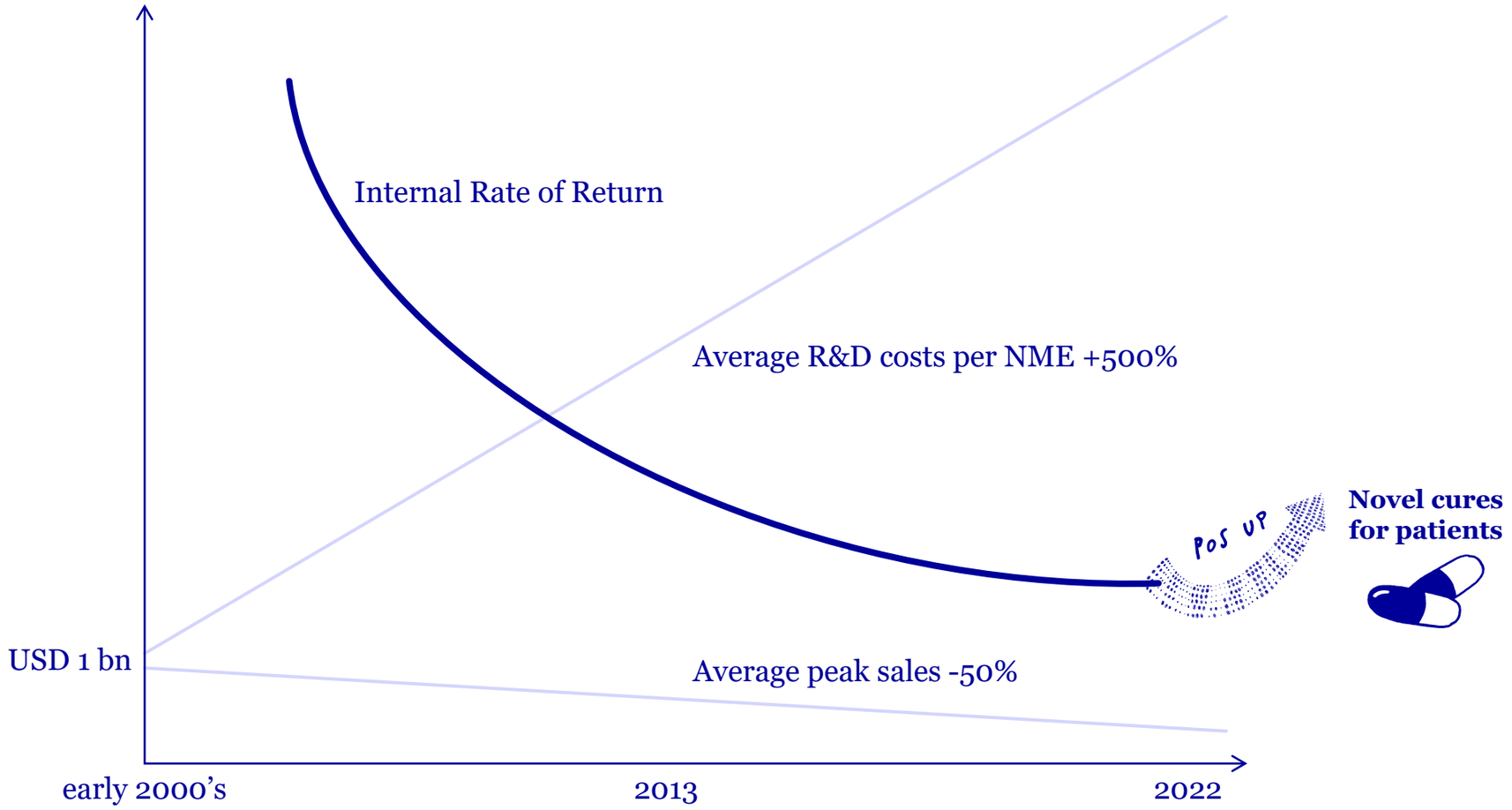
1.5-2 Trillion USD

~10% of entire US economy

1 Dan, Adrian G. "Surgery for Obesity ... a Family Journey!" *Bariatric Times*, 1 Jan. 2023, bariatrictimes.com/surgery-for-obesity-family-journey/.
2 Thompson, Derek. "The Weight-Loss-Drug Revolution Is a Miracle—and a Menace." *The Atlantic*, 27 Jan. 2023, www.theatlantic.com/newsletters/archive/2023/01/the-weight-loss-drug-revolution-is-a-miracle-and-a-menace/672861/.
Source: Bloomberg Businessweek; SEMAFOR Flagship; team analysis

Reverting IRR[1] by bringing Probabilities of Success (PoS) up

R&D productivity (illustrative)



R&D productivity has not recovered, yet

- Higher spent with lower peak sales leads to deteriorating IRR[1]
- IRA[2] is "new" reality
- In 2023, average return of some pharma companies are set to improve (e.g. GLP-1 drugs)
- A.I./ML-driven technologies start to improve attrition rates
- Novel cures and higher PoS shape new markets and increase IRR

1 IRR = Internal Rates of Returns
2 IRA = Inflation Reduction Act
Source: Alexander Schuhmacher: Analysis of pharma R&D productivity – a new perspective needed

Together for medicines that matter

Game changers within business to business / partnered R&D and pipeline building

Need for more precision
Most drugs still provide benefit in only 50% of patients

Need for better disease understanding
More than 30% have a lifetime risk for cancer

Need for better safety earlier
60% of all drugs still do not pass Phase I

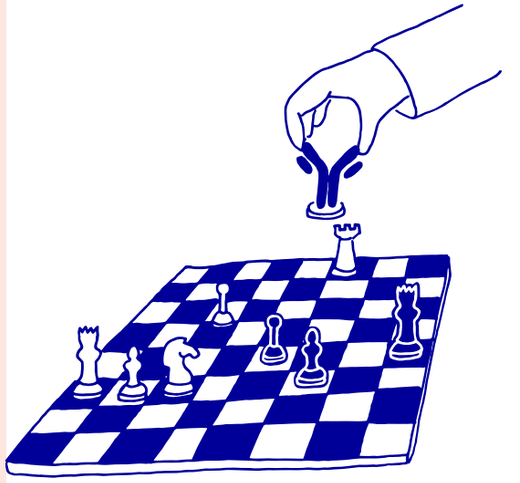
Need for wider access
Less than 20% of world's population have access to life changing biotherapeutics

Better pipeline building
Right indication, right patients, right dose

Technology convergence
A.I./ML coming together with drug discovery, development, safety prediction and molecular diagnostics

Better business models
Shared economy in R&D

- *From fixed to variable costs*
- *More effective learning curves for all*



The biopharma innovation toolbox has never been richer

Illustrative examples

Evolvement of targeted **protein degradation**

Multi-omics gaining momentum

mRNA vaccine technology used

Discovery with **iPSCs**

First use of **CRISPR** nucleases in gene editing

First **gene therapy** trials launched

Completion of the **Human Genome Project**

Cell therapy evolving as new modality in many diseases

Establishing of **A.I. in medicine**

Personalized medicine

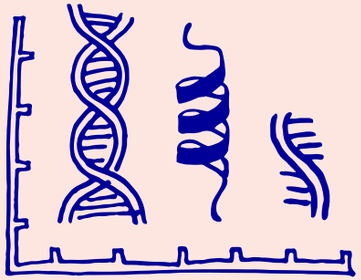
Gene editing evolving as a modality

Let’s talk about modality agnostic pipeline building

Our focus for today

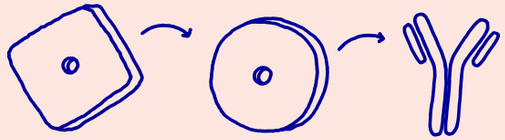
Our focus areas

PanOmics[1]



iPSC cell therapy

Just – Evotec Biologics

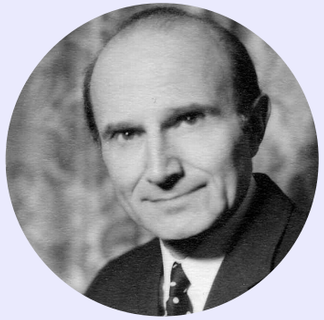


End-to-End Shared R&D

We follow science, and open massive new opportunities

Selected scientific giants

From bone marrow transplants to induced pluripotent stem cells



George Mathé

Shinya Yamanaka

From DNA to RNA to Proteins – "PanOmics"

Leroy Hood

Walter Gilbert

Paul Berg

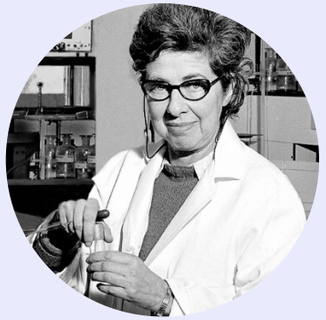
Frederick Sanger

Matthias Manns

Mark Wilkins

From discovery of antibodies to biologics

Emil von Behring



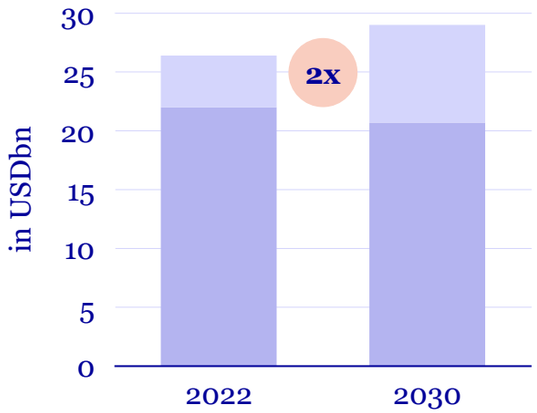
Brigitte Askonas

George Mathé: Pioneer of bone marrow transplantation / Shinya Ymanaka: Nobel Prize in 2012 for his groundbreaking discovery of induced pluripotent stem cells / Leroy Hood: developer of first protein sequencer / Walter Gilbert, Paul Berg, Frederick Sanger: Nobel Prize in 1980 for their contributions to basic research involving nucleic acids, especially recombinant DNA / Matthias Manns: A leader in the technology and application of mass spectrometry-based proteomics / Mark Wilkins: Development of the concept of the proteome / Emil von Behring: Nobel Prize in 1901 for for his discovery of a diphtheria "antitoxin" / Brigitte "Ita" Askonas: First scientist to isolate and clone T cells

New technologies leading to new opportunities

Shaping (new) markets

End-to-End shared R&D

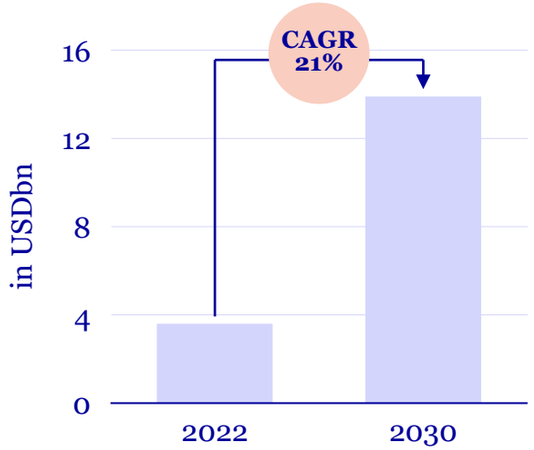


Outsourcing
Large Pharma in-house

Drivers

Deteriorating IRRs increase demand for outsourcing & higher efficiency

PanOmics

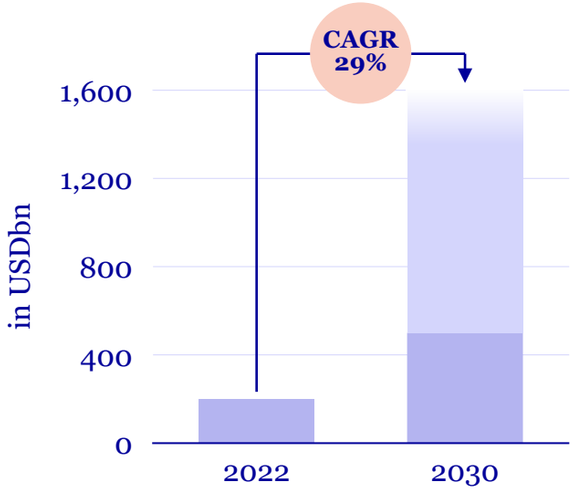


Multi Omics market

Drivers

Precise medicines & diagnostics leading to patient specific treatments

iPSC cell therapy

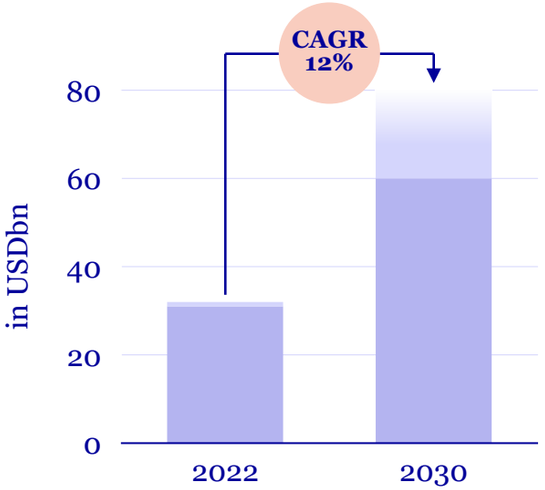


Replacing (donor) allogenic therapies
iPSC cell therapy

Drivers

From donor dependency to scalable off-the-shelf solutions

Biologics



Continuous manufacturing
Biologic discovery & manufacturing

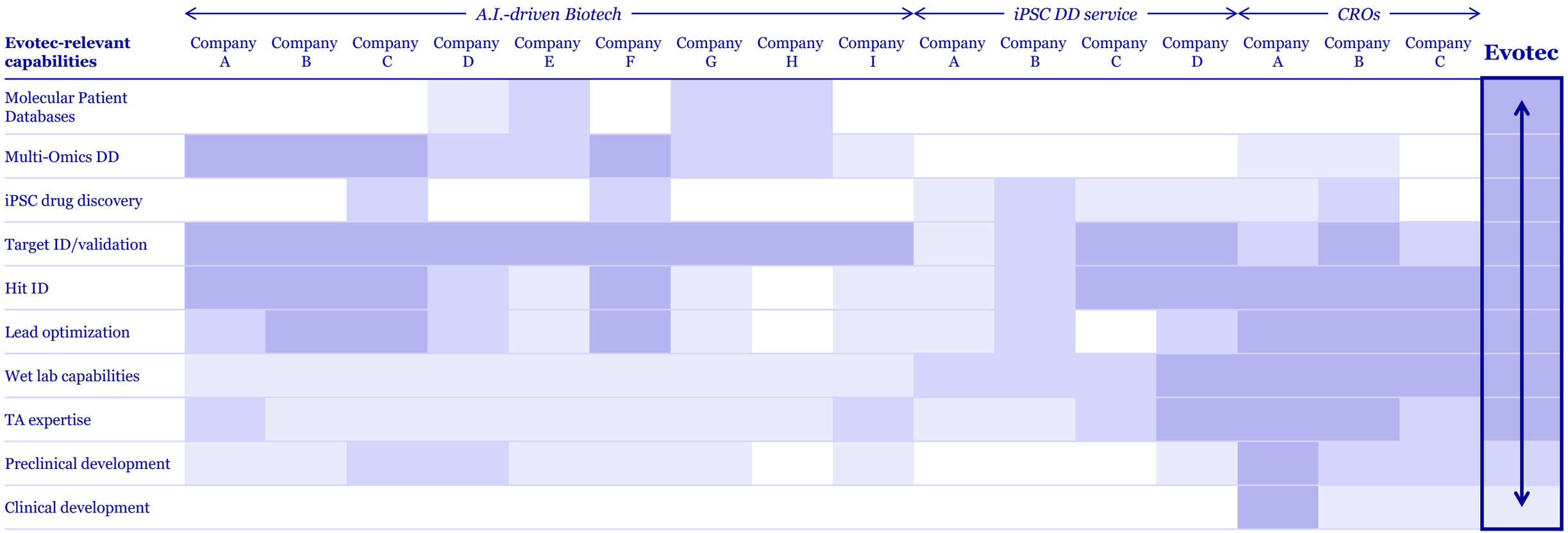
Drivers

Regulatory changes (e.g. IRA) driving need to increase agility & flexibility

Sources: Grand View Research; Precedence Research; Mordor Intelligence; SNS Insider; Evaluate Pharma Analysis; Global Market Insights gminsights.com

Broadest set of value adding capabilities

Unique integrated offering



Unique starting points with Molecular Patient Databases

Level of offering High Medium Low No offering

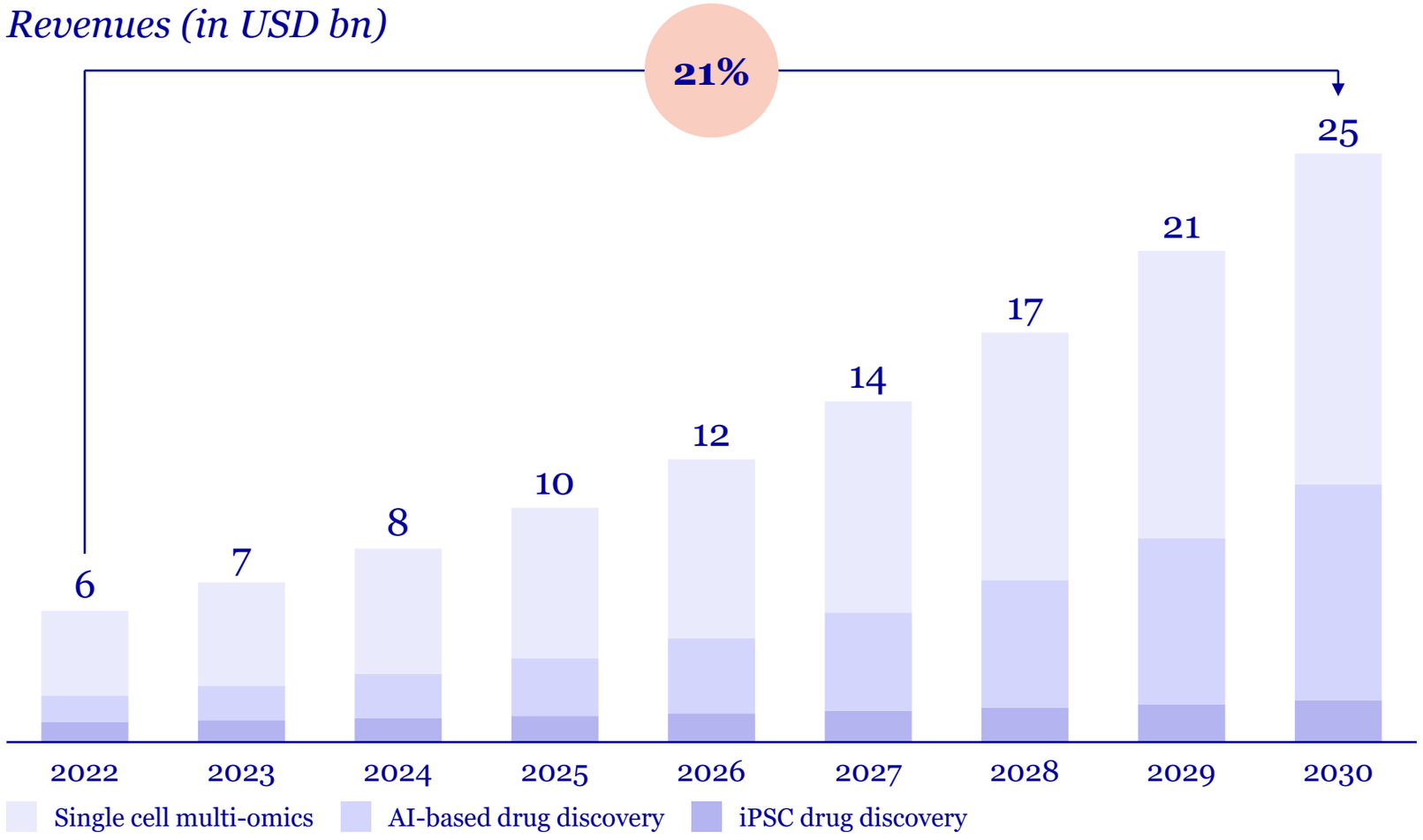
AI: Artificial Intelligence; ML: Machine Learning; TAs: Therapeutic Areas; MPD: Molecular Patient Database; DD: Drug Discovery; Hit ID: Hit identification | Source: Company Websites
NOTE: Heatmap built based on capability strength based on publicly disclosed data

PanOmics is a massive opportunity

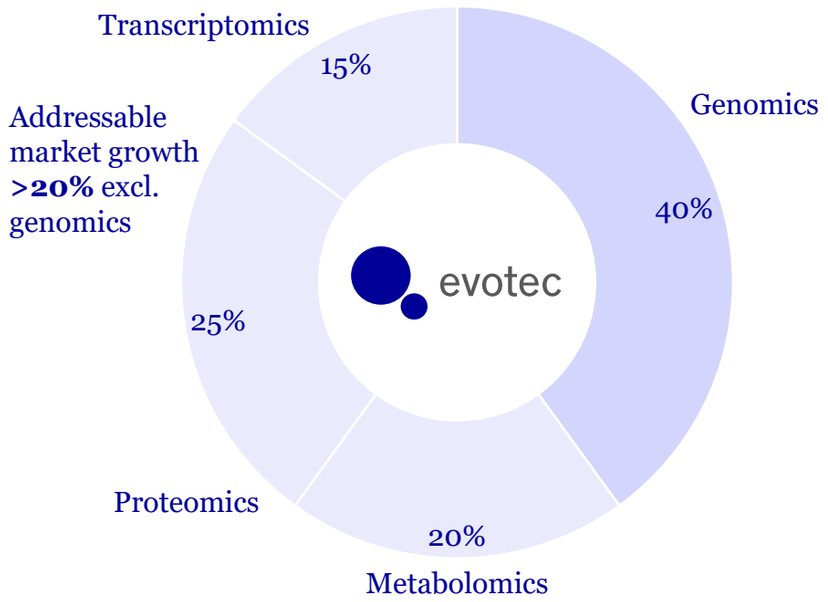
Addressable market analysis

Addressable market

Revenues (in USD bn)



Market distribution and growth by application – 2030

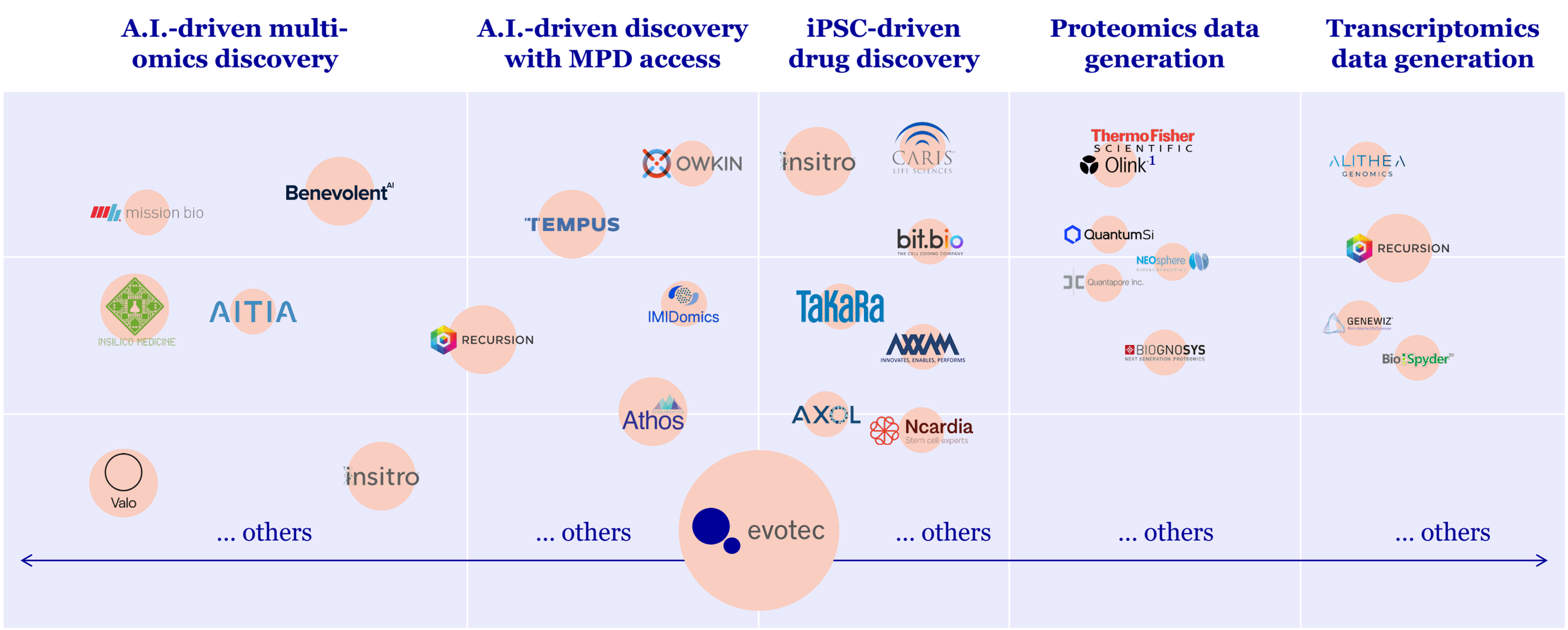


- **Genomics** will continue to grow
- **Proteomics** and **metabolomics** to outpace Genomics

CAGR: Compound Annual Growth Rate; iPSC: Induced Pluripotent Stem Cells; TA: Therapeutic Area; AI: Artificial Intelligence | Source: Grand View Research; Precedence Research; Mordor Intelligence, own estimates

Fully integrated offering to secure data integrity

Simplified competitive landscape analysis

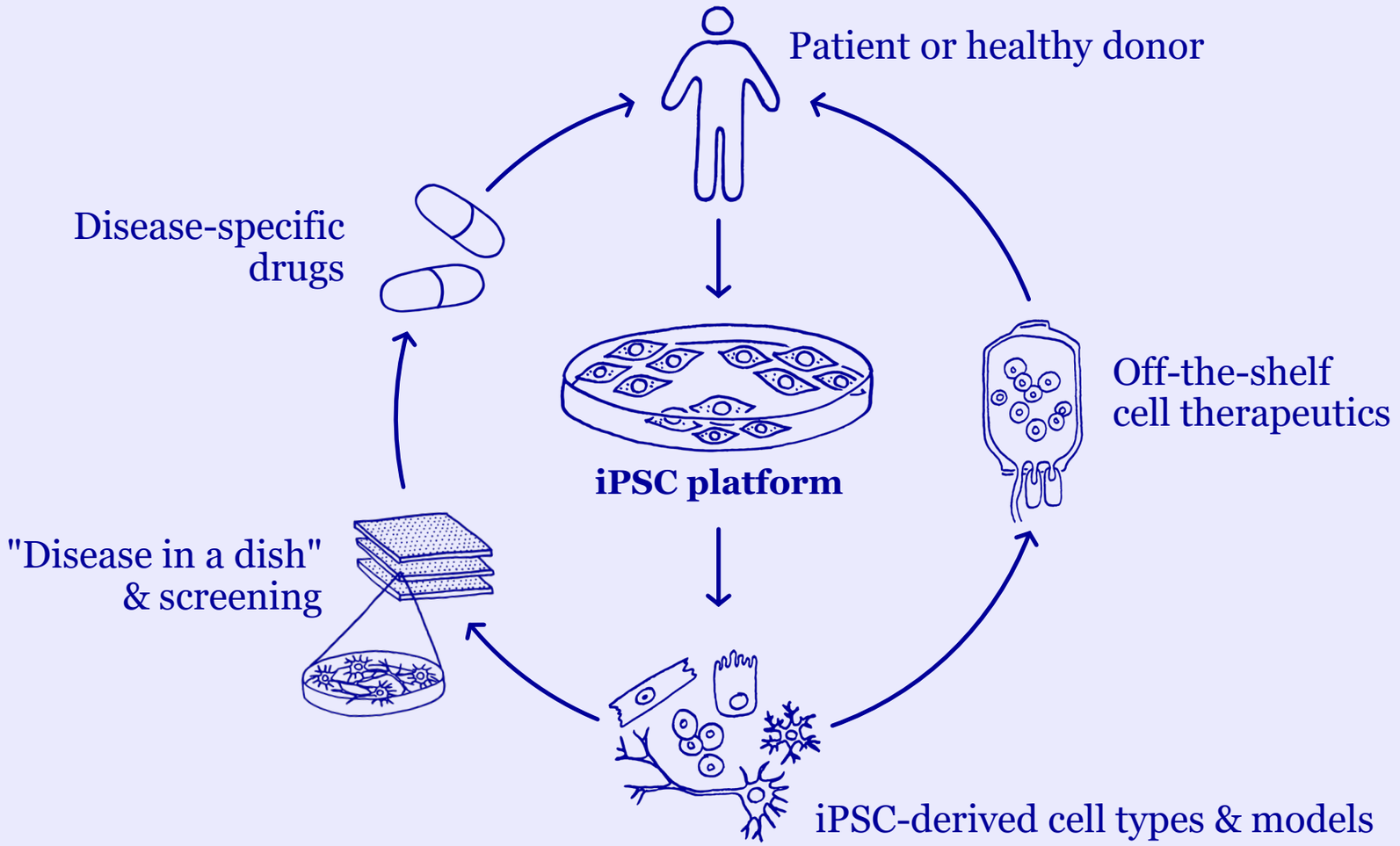


A.I.: Artificial Intelligence; MPD: Molecular Patient database; iPSC: Induced Pluripotent Stem Cells | Source: Company Websites
1 Olink was acquired by Thermo Fischer

From humans for humans

iPSC-based drug discovery and off-the-shelf cell therapy

E.iPSC –
Human disease
relevant modelling



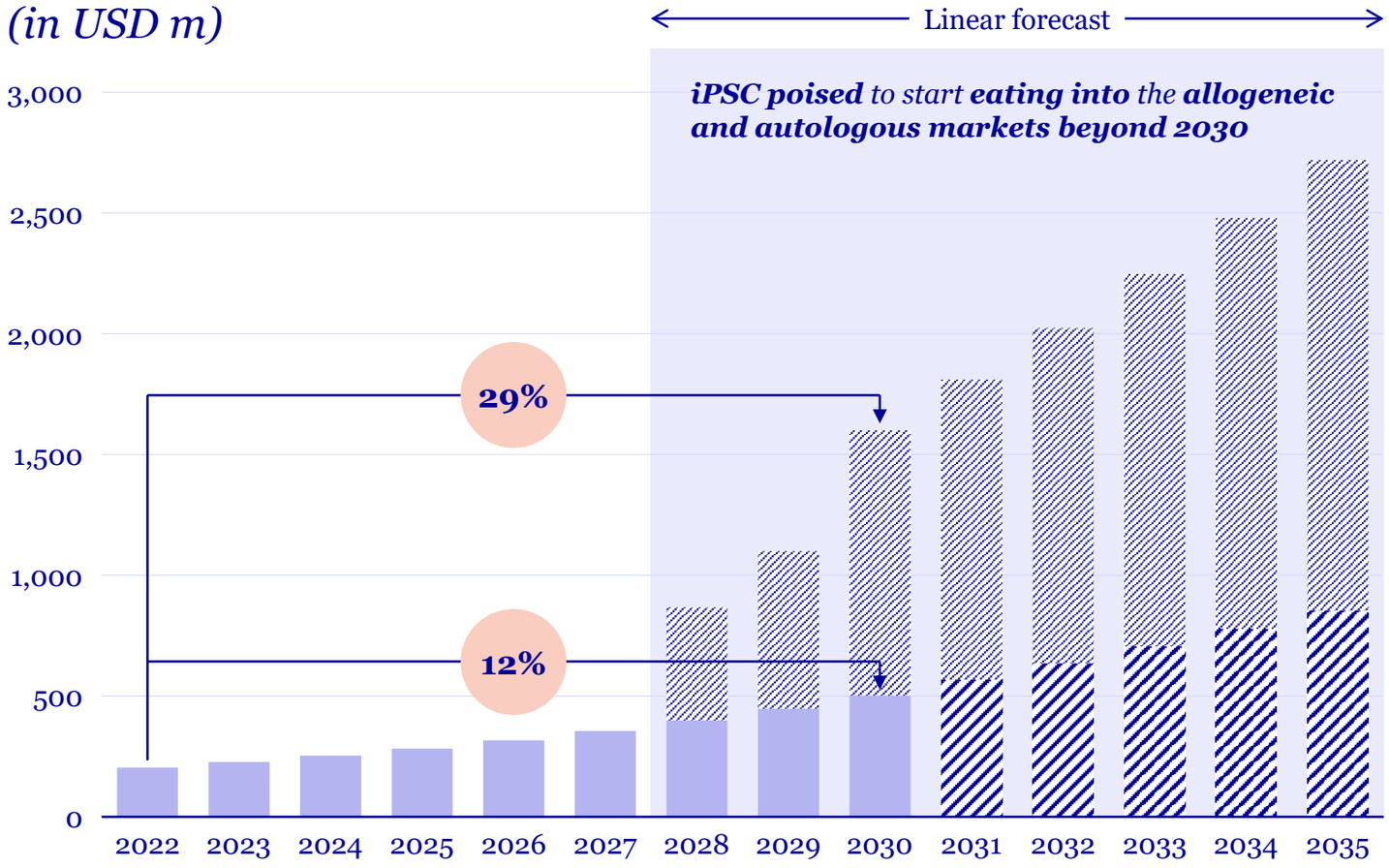
**iPSC-based
off-the-shelf
therapeutics**

iPSC market growth will be driven by clinical and commercial validation

Addressable market analysis

Addressable market

(in USD m)

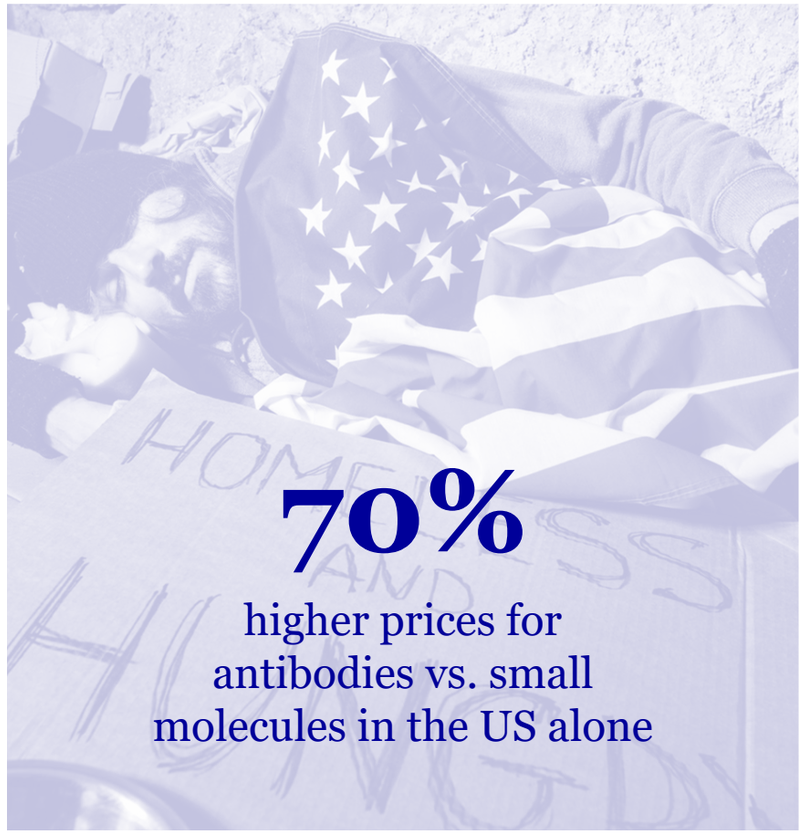


Heterogeneous mix of service and product players – no other integrated offering for partnered pipeline building

CAGR: Compound Annual Growth Rate; iPSC: Induced Pluripotent Stem Cells; TA: Therapeutic Areas | Source: Grand View Research; Mordor Intelligence; Precedence Market Research; Evaluate Pharma Analysis, own estimates

Providing cost efficient access for biologics is our “North Star”

Limited access to biologics exists today in many patient segments



70%

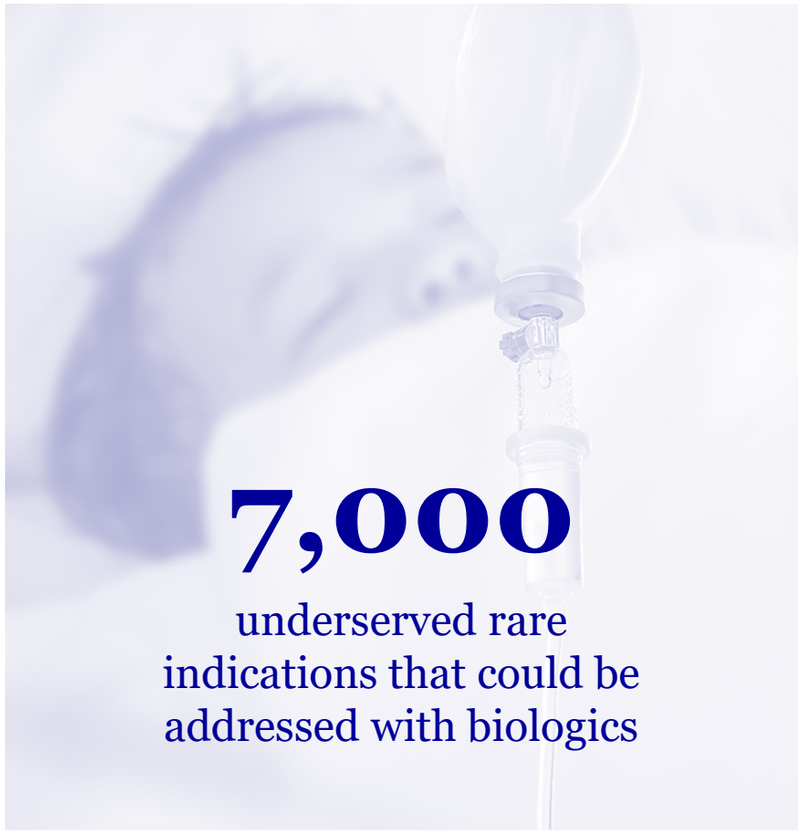
higher prices for antibodies vs. small molecules in the US alone

Underserved populations

6 bn

without access to biologics based on geography

Underserved regions[1]



7,000

underserved rare indications that could be addressed with biologics

Underserved indications

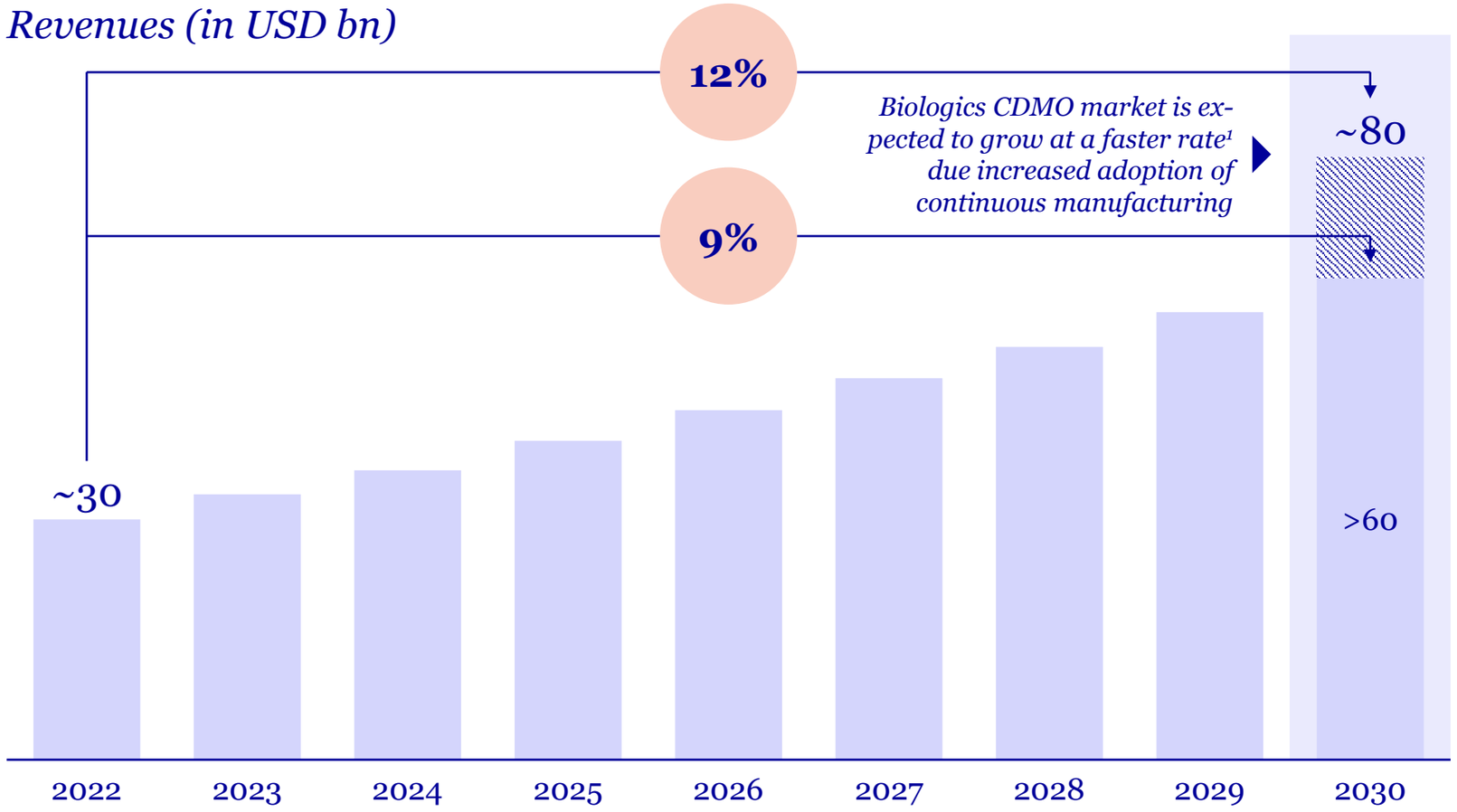
1 Photo by Muhammad Muzamil on Unsplash
2 Photo by Isaac Quesada on Unsplash

Continuous manufacturing is the paradigm shift shaping the market

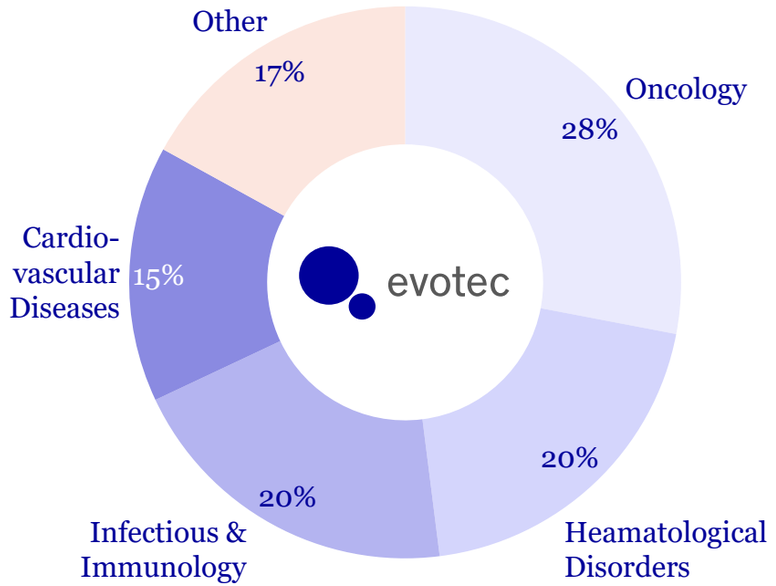
Market size and growth

Biologics discovery + manufacturing market

Revenues (in USD bn)



Market shares by Therapeutic Areas 2022

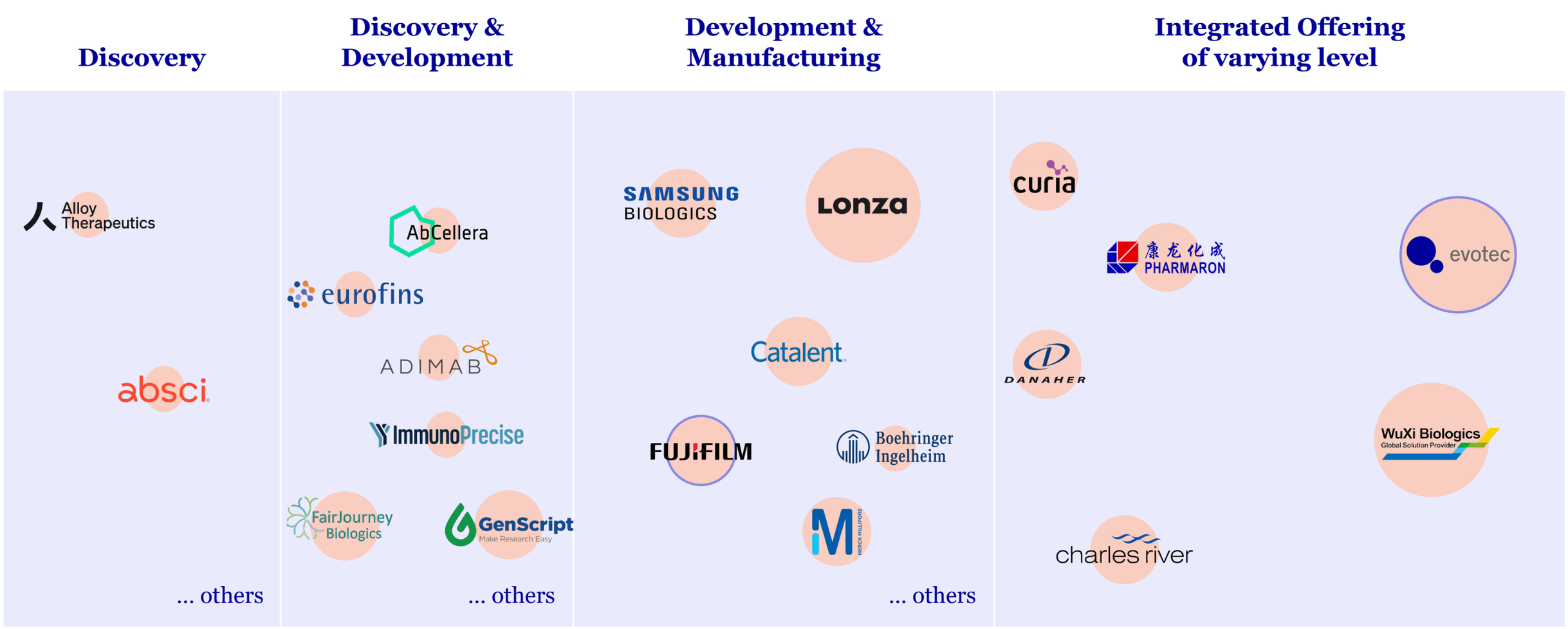


- **Oncology dominated** the market in the past
- **Hematological disorders** and **cardio-vascular diseases** expected to **drive** the **market growth** in the **next years**

1 CAGR of 15% assumed for the Biologics CDMO market based continuous manufacturing growth for continuous manufacturing market
CAGR: Compound Annual Growth Rate; IRA: Inflation Reduction Act; TA: Therapeutic Areas; AI: Artificial Intelligence; CDMO: Contract Development and Manufacturing Organization; COGS: Cost of Goods Sold | Source: Grand View Research; Mordor Intelligence; Roots Analysis; Evaluate Pharma

We have a fully integrated offering

Key competitor analysis



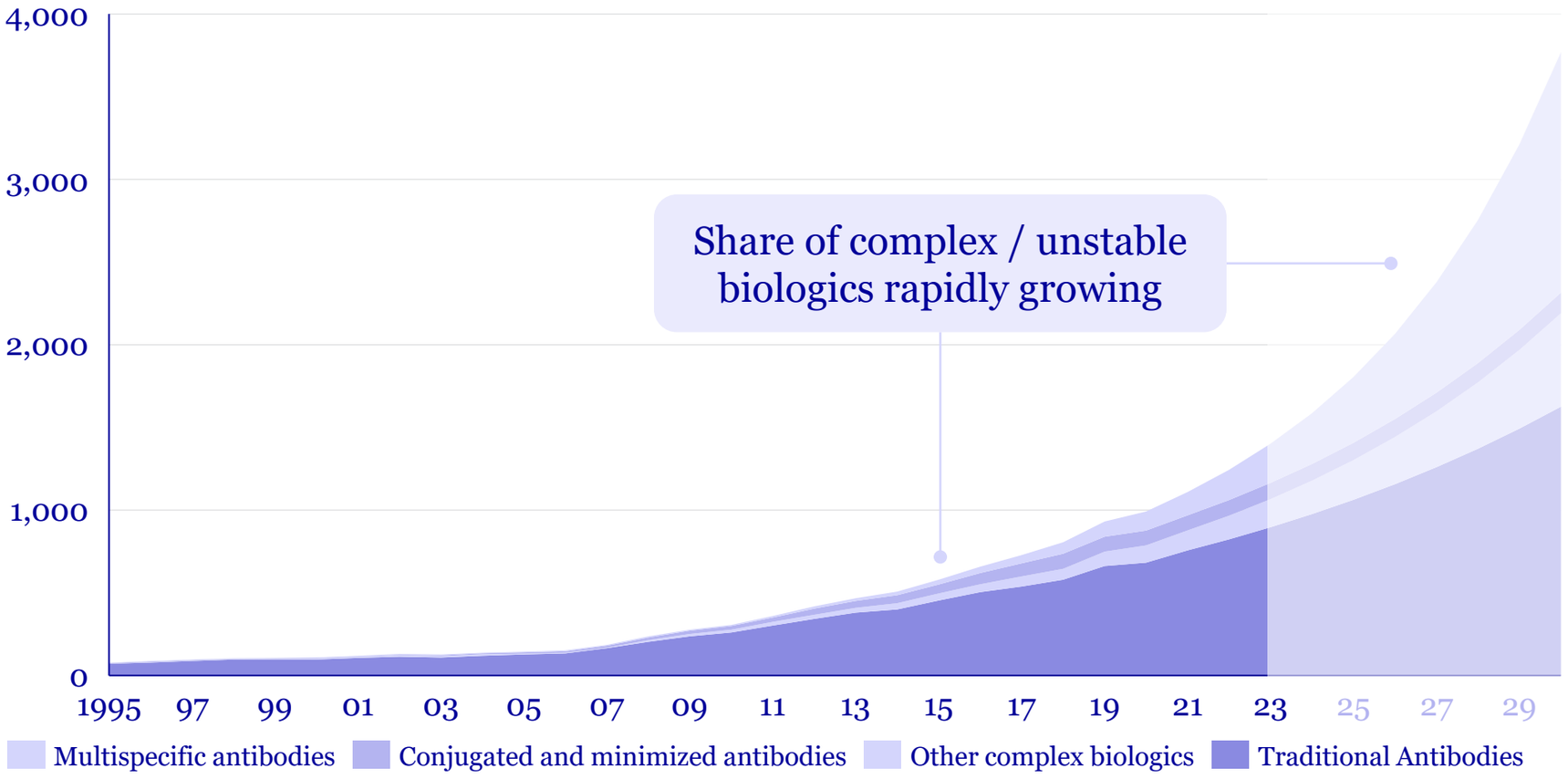
AI: Artificial Intelligence; ML: Machine Learning; MPD: Molecular Patient database; Target ID: Target Identification; iPSC: Induced Pluripotent Stem Cells; CRO: Contract Research Organization | Source: Company Websites

Our continuous platform will even further excel with complex biologics

Trends in global biologics pipelines

Size of global pipeline by therapeutic modality

Number of products[1], from Phase I to III



Share of complex biologics in the pipeline

Just EVOTEC BIOLOGICS — >40%

Industry average — ~30%

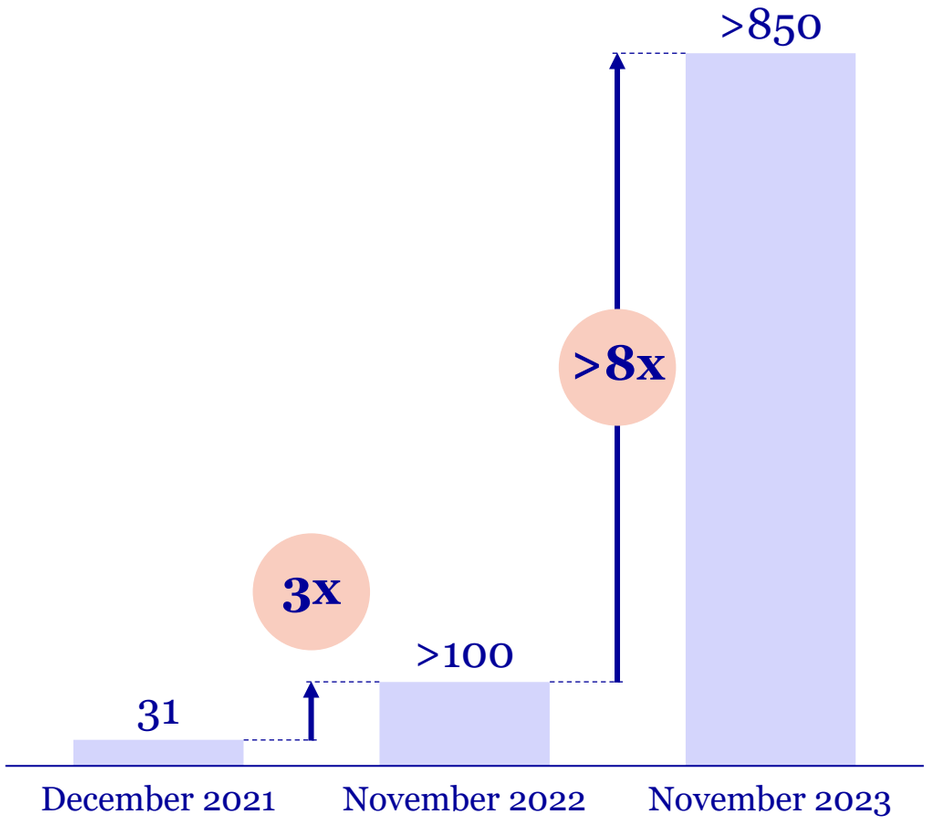
1 Innovative drugs only, excluding reformulations, biosimilars, diagnostics & imaging; snapshot as of June each year with missing phases not approximated; development status based on most progressed indication
Source: Pharmaprojects Oct 2021; McKinsey analysis; interpolated data

Just – Evotec Biologics is building markets faster than expected

Key achievements 2021-2023

Closed Sales

in € m



Key progress

SANDOZ

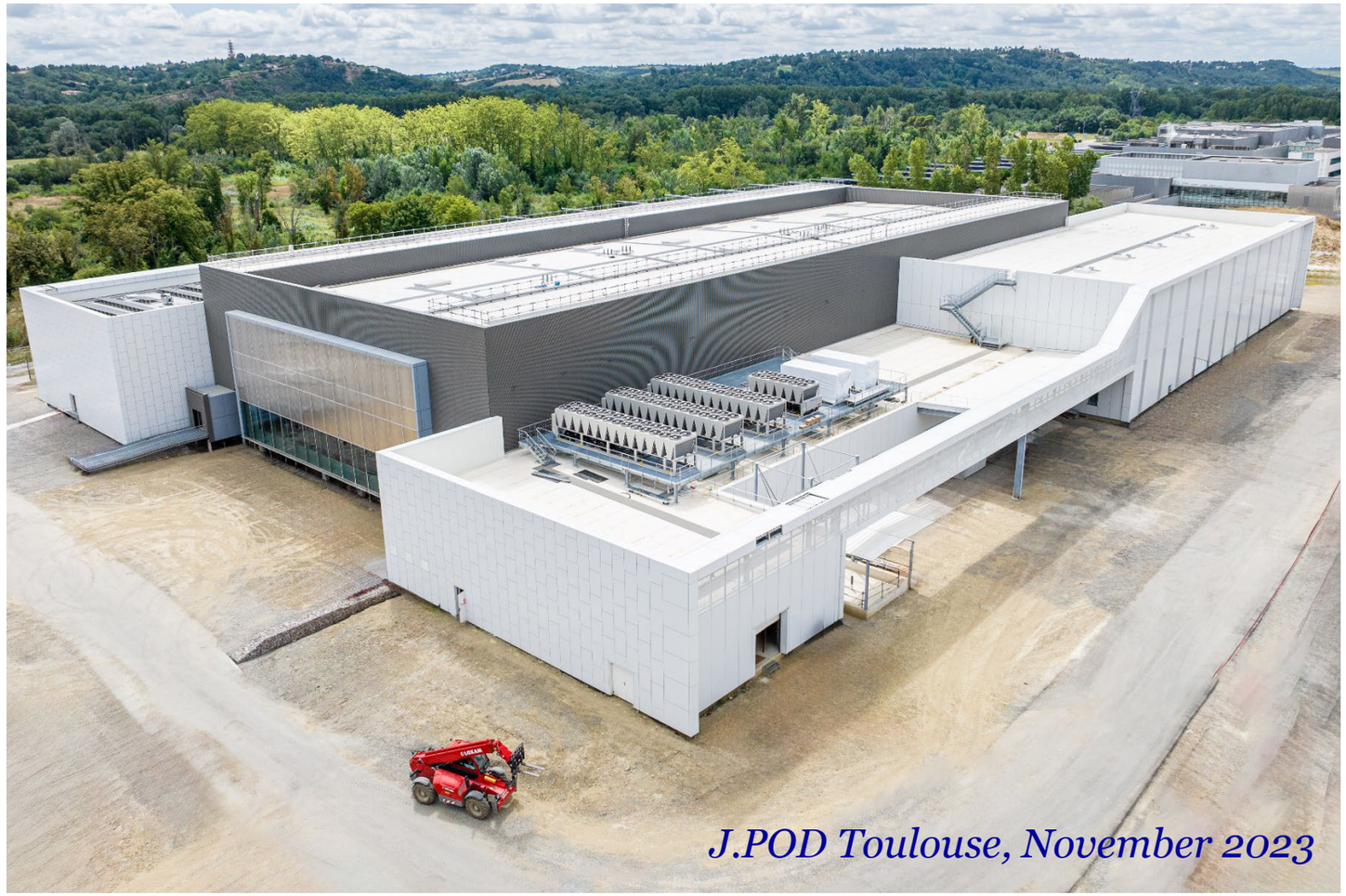
Up to US$ 640 m for development work plus massive upside

Anti-Plague mAb development programme initiated

Development programme for Orthopoxvirus mAb candidates

Redmond is online – Toulouse ready to start in 2024

Progression on track



J.POD – commercial biologics manufacturing site in Toulouse stepping up

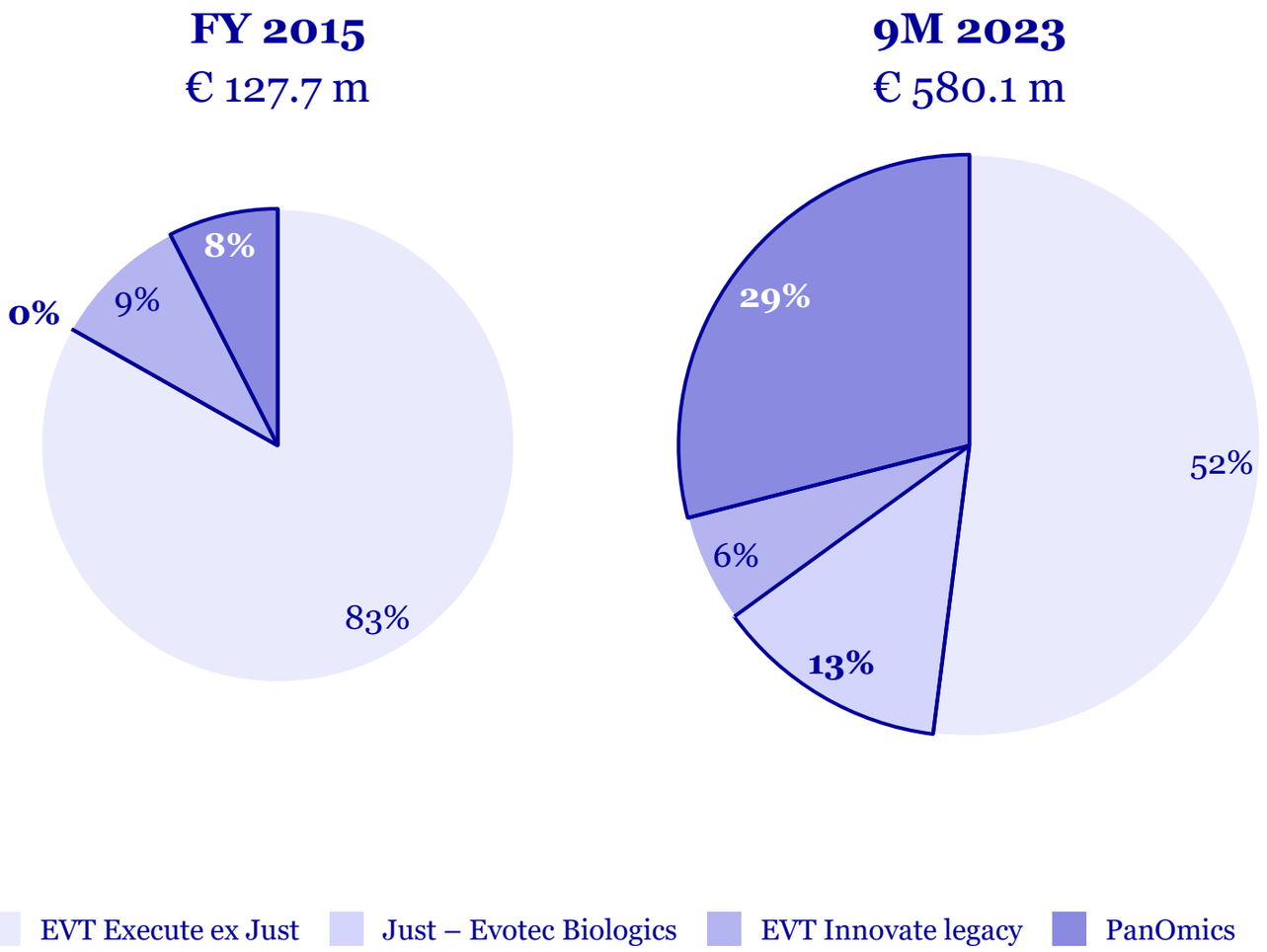
- Ground-breaking for second biologics facility J.POD Toulouse in September 2022
- Building of shell and installation of PODs completed – on track for completion in H2 2024
- Ready to initiate FIH[1] programs
- Start of Business Development: Filling CLD/PD[2] labs in 2024 to have manufacturing process ready when cGMP suites are operational in 2025

1 FIH: First in Human
2 CLD/PD: Cell Line Development/Process Development

1 This project benefits from French government funding as part of the Investments for the future Programme (programme d'investissements d'avenir in French) and is also supported economically by the Occitanie Region and Toulouse Métropole.

Paradigm-shifting platforms are key growth drivers

Revenue distribution 2015 versus 9M 2023



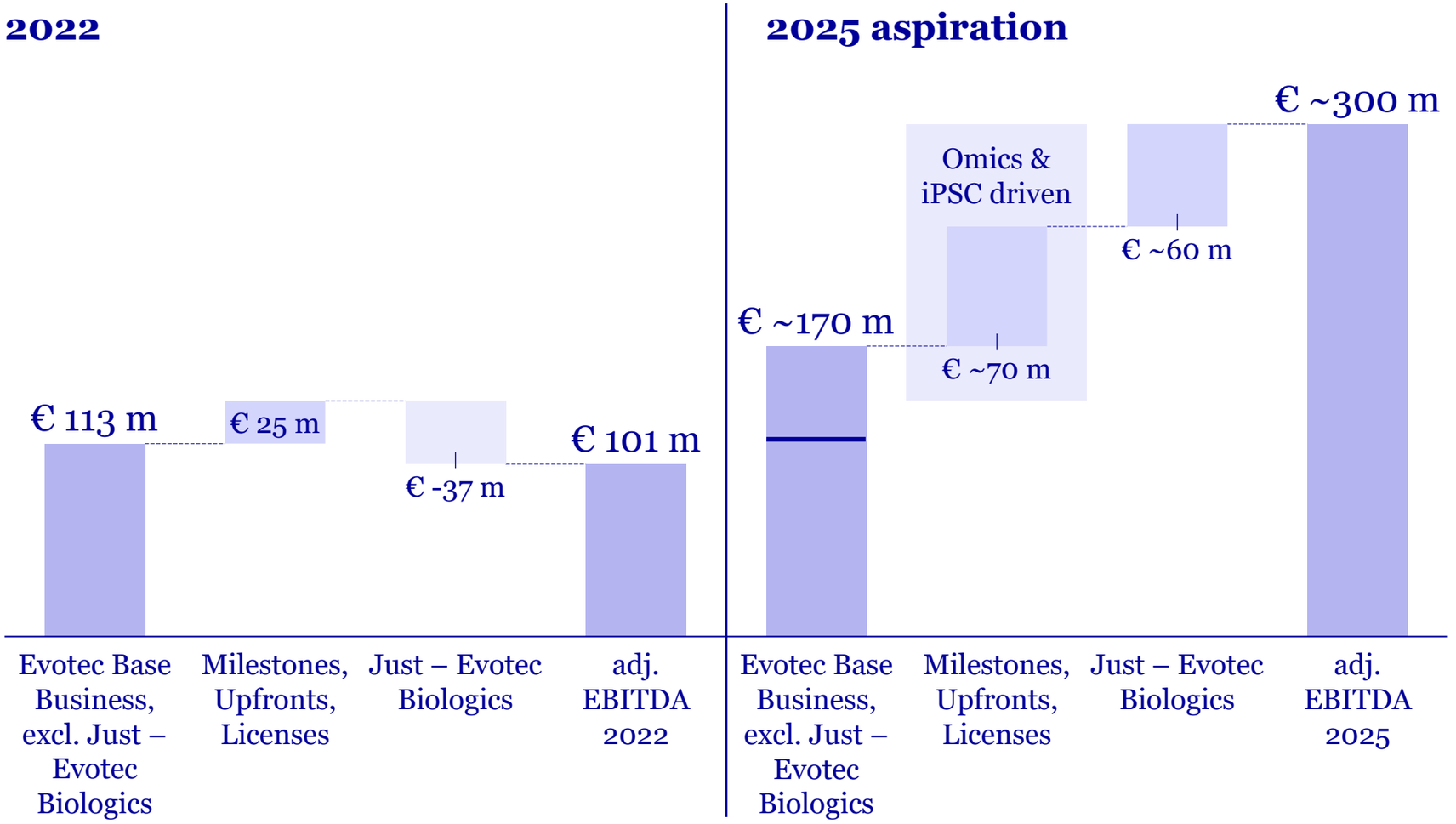
Revenue CAGRs$_{2015 - 9M 2023}$ outpacing base business

- PanOmics ~50%
- € 76.5 m incremental contribution from Just – Evotec Biologics since 2019
- EVT Innovate ex PanOmics ~20%
- EVT Execute ex Just – Evotec Biologics ~20%

On track to reach revenue aspiration 2025

… and a key contributor to acceleration of milestones

Mid-term adj. EBITDA bridge



Well-balanced cascade

- Income from Milestones, Upfronts, Licenses ex-panding due to increasing breadth and depth of PanOmics-based pipeline
- Accelerated growth of Just – Evotec Biologics
- Base business adj. EBITDA CAGR of 15%
  - Robust top-line growth
  - Operating leverage
  - Efficiency Programmes (e.g. VPP)

Action Plan 2025 on track

Action Plans in numbers

2009 2012 2018 2021

Action Plan 2012
Restructure for growth

2010

- Revenues: € 55 m
- Adj. EBITDA: € 2 m
- R&D investments[1]: € 2 m
- Co-owned projects[2]: 6
- Employees: 519

Action Plan 2016
Build innovation seeds

2015

- Revenues: € 128 m
- Adj. EBITDA: € 9 m
- R&D investments[1]: € 18 m
- Co-owned projects[2]: 49
- Employees: 1,000

Action Plan 2022
Aspire global leadership

2020

- Revenues: € 501 m
- Adj. EBITDA: € 107 m
- R&D investments[1]: € 69 m
- Co-owned projects[2]: 118
- Employees: 3,572

Action Plan 2025
Leadership in data, science, multimodality & access

2025

- Revenues: > € 1 bn
- Adj. EBITDA: > € 300 m
- R&D investments[1]: > € 100 m
- Co-owned projects[2]: > 250
- Employees: > 5,000

Underlying external challenges

Financial crisis | MERS | Avian Influenza | Brexit | COVID-19 | War in Ukraine | Cyber-attack | Israel Gaza war

1 Including equity investments
2 Does not include EVT equity investments

Agenda

9:00-9:30	Shaping (new) markets
9:30-11:00	PanOmics – From patients for patients
	• *Better disease understanding & diagnostics*
	• *Advanced disease modelling*
	• *A.I. use cases along the value chain*
11:00-11:15	*Coffee Break*
11:15-12:15	Impactful therapies
	• *Integrated platform*
	• *Diabetes*
	• *Oncology*
12:15-13:30	*Lunch Break*
13:30-16:00	Round Tables

R&D productivity remains the grand challenge for big pharma

Record spending does not translate into R&D output – selected KPIs

$ 138 bn

R&D Spending of "Top 15 Pharma" in 2022[1]

<2%

Clinical pipeline growth[2]

~44%

Pharma companies with negative R&D productivity[3]

$ 6.16 bn

R&D expenditure per new drug[4]

1-3 IQVIA Institute: Global Trends in R&D 2023. Activity, Productivity, and Enablers, February 2023.
4 Schuhmacher A, Hinder M, von Stegmann Und Stein A, Hartl D, Gassmann O. Analysis of pharma R&D productivity - a new perspective needed. Drug Discov Today. 2023 Oct;28(10):103726. doi: 10.1016/j.drudis.2023.103726. Epub 2023 Jul 26. PMID: 37506762.

Increasing the probability of success is key

Attrition rates have not improved – selected KPIs

~95%

False discovery rate in the pre-clinic[1]

>93%

Clinical attrition up to market launch[2]

>32%

Post-market safety events of FDA-approved drugs[3]

0.78

Annual drug launches per "Big Pharma"[4]

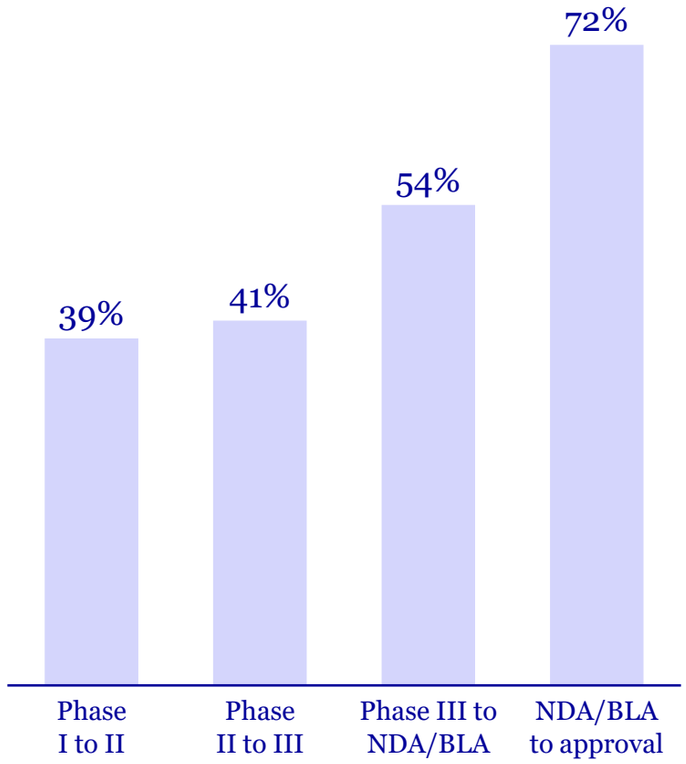
1 Hingorani, A.D., Kuan, V., Finan, C. et al. Improving the odds of drug development success through human genomics: modelling study. Sci Rep 9, 18911 (2019). https://doi.org/10.1038/s41598-019-54849-w
2 IQVIA Institute: Global Trends in R&D 2023. Activity, Productivity, and Enablers, February 2023.
3 Downing NS, et al. Postmarket Safety Events Among Novel Therapeutics Approved by the US Food and Drug Administration. JAMA. 2017;317(18):1854–1863. doi:10.1001/jama.2017.5150
4 Schuhmacher A, et al. Analysis of pharma R&D productivity - a new perspective needed. Drug Discov Today. 2023 Oct;28(10):103726. doi: 10.1016/j.drudis.2023.103726. Epub 2023 Jul 26. PMID: 37506762.

Probability of success on the decline in most indications

Overall composite clinical success rate for all indications at 6% in 2022

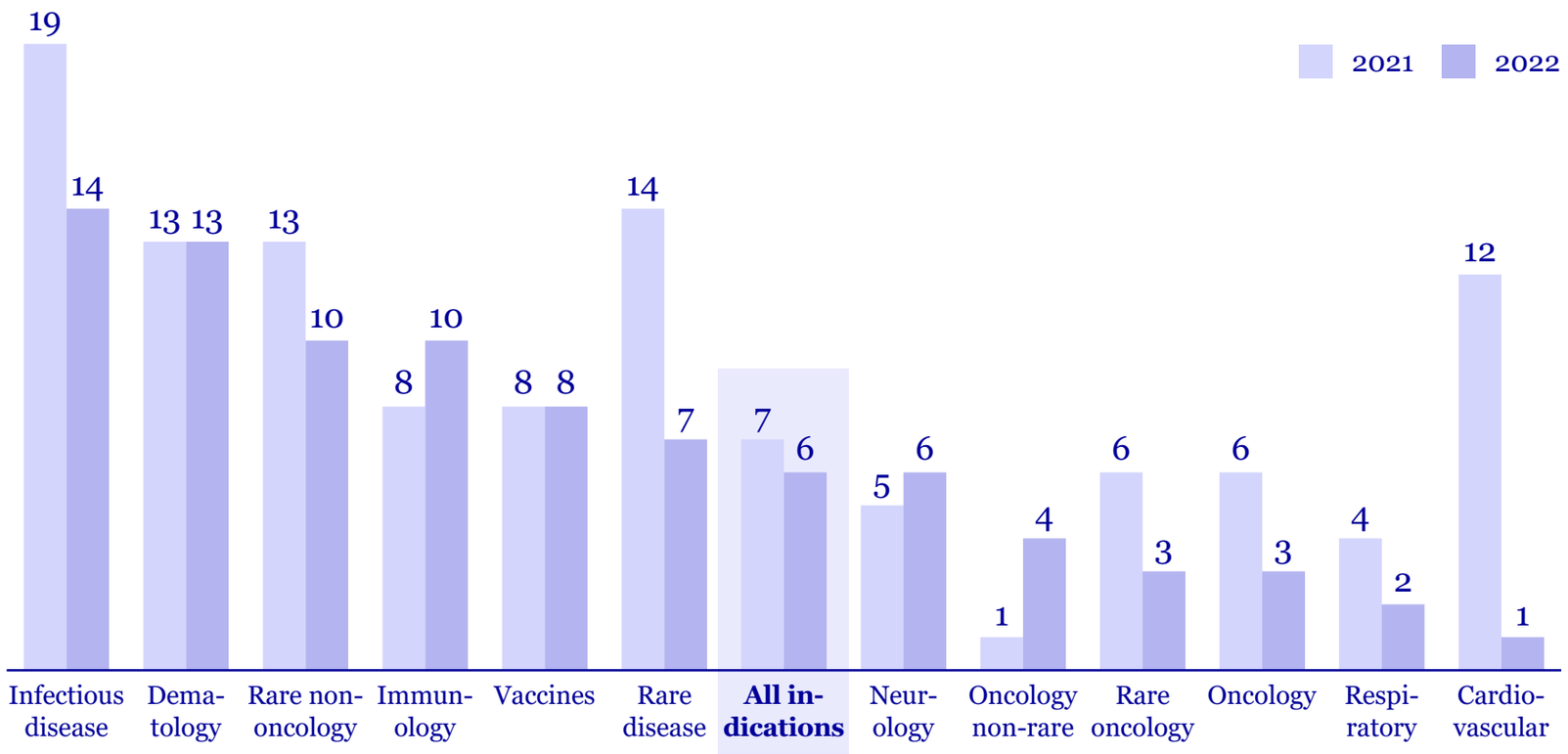
Probability of success

success rate = number that advanced to next phase/total number advanced & suspended



Overall clinical success rates

in %



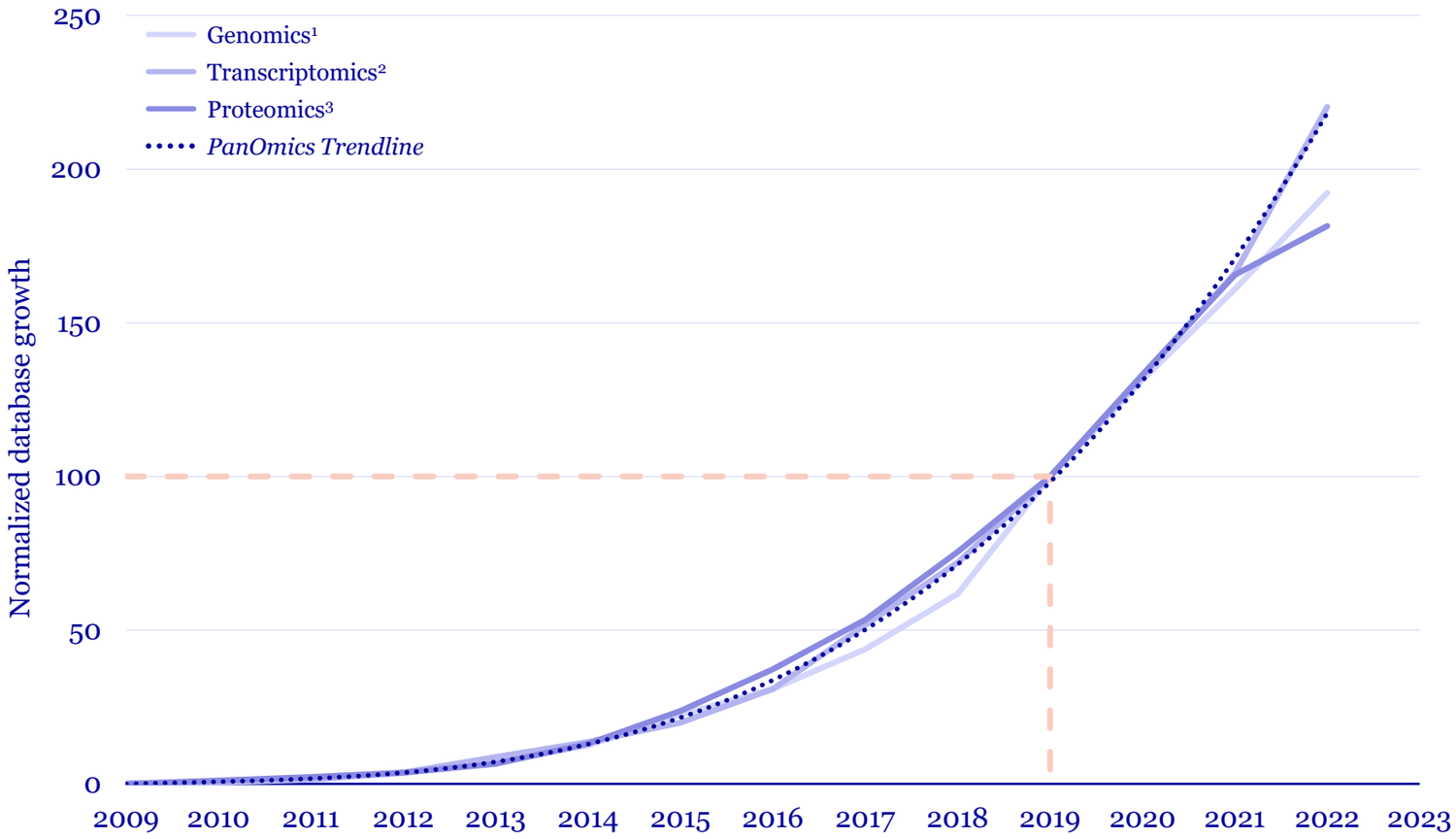
Sources: IQVIA Institute: Global Trends in R&D 2023. Activity, Productivity, and Enablers, February 2023.

Omics data is a key driver of the precision medicine megatrend

Published Omics data

- *Published Omics data keeps accumulating at an exponential rate*
- *Between 2019 and 2022 as much Omics data was published as in the ten prior years combined (2009 to 2019)*
- *Unpublished Omics data generated by Biotech and Pharma is expected to exceed published Omics data*

Exponential Omics data generation



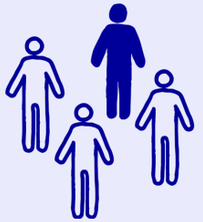
1 NCBI – GenBank and WGS Statistics (https://www.ncbi.nlm.nih.gov/genbank/statistics/)
2 NCBI – Sequence Read Archive (SRA; https://www.ncbi.nlm.nih.gov/sra/docs/sragrowth/)
3 Perez-Riverol et al., The PRIDE database and related tools and resources in 2019 (doi.org/10.1093/nar/gky1106)

A precision medicine platform is driven by PanOmics

Leading A.I./M.L. driven drug discovery & development platforms

Molecular patient databases

Re-defining health and disease via molecular disease profiles



Patient derived disease models & precision medicine approaches

Focus on disease relevance

Patient stratification and biomarkers

Precision diagnostics and tracking of diseases

PanOmics
Data Generation

- Genomics, **transcriptomics, proteomics,** metabolomics data at industrial scale
- High performance, industrial scale platforms

PanHunter
Interactive Omics Analysis

- User friendly A.I./M.L. driven multi-omics analysis platform
- Exceeding industry standards in e.g. predicting drug safety

E.iPSC
Drug Discovery

- One of the largest and most sophisticated iPSC platforms for drug discovery in the industry
- First IND in clinical development; large pipeline evolving

R&D investments generate highly strategic partnerships with upside

~40% average annual revenue growth since 2015

Total R&D costs since 2010

€ ~450 m

About € 2.5 m invested per partnered project.

Break-even well before entrance in clinical trials.

Total number of pharma deals / partnered product opportunities

AstraZeneca, Bristol Myers Squibb, Johnson & Johnson, Pfizer, Takeda, Bayer, Boehringer Ingelheim, Chinook Therapeutics (A Novartis Company), Lilly, Janssen, novo nordisk, sanofi

>40

~140 partnered product opportunities

Total revenues received

€ >1 bn

Total upfronts received

€ >500 m

Total MS upside

€ >15 bn

Average Royalties

~8-10%

Using human derived disease models as real paradigm shift

Neurodegeneration alliance with BMS

Broadened and deepened strategic alliance in neurodegeneration

- Extension and expansion for 8 more years
- Collaboration leverages Evotec's iPSC disease modelling capabilities in the field of neurodegenerative diseases
- $ 50 m upfront payment
- Potential milestone and performance based payments of > 4 bn
  - Already $ 40 m in payments received in 2023
- Tiered royalties of up to low double-digit percentage for each programme

evotec

Bristol Myers Squibb™

Largest deal in one of the most competitive fields in the industry

Targeted protein degradation alliance with BMS

Developing a pipeline of breakthrough therapies based on molecular glue degraders

- 8-year extension and significant expansion of original agreement signed in 2018
- Collaboration leverages Evotec's PanOmics and PanHunter platforms including A.I./M.L. capabilities
- Upfront payment of $ 200 m
- Performance payments of $ 75 m announced in March 2023
- Additionally, tiered royalties for each program
- Total deal value of up to € 5 bn; milestone-based payments

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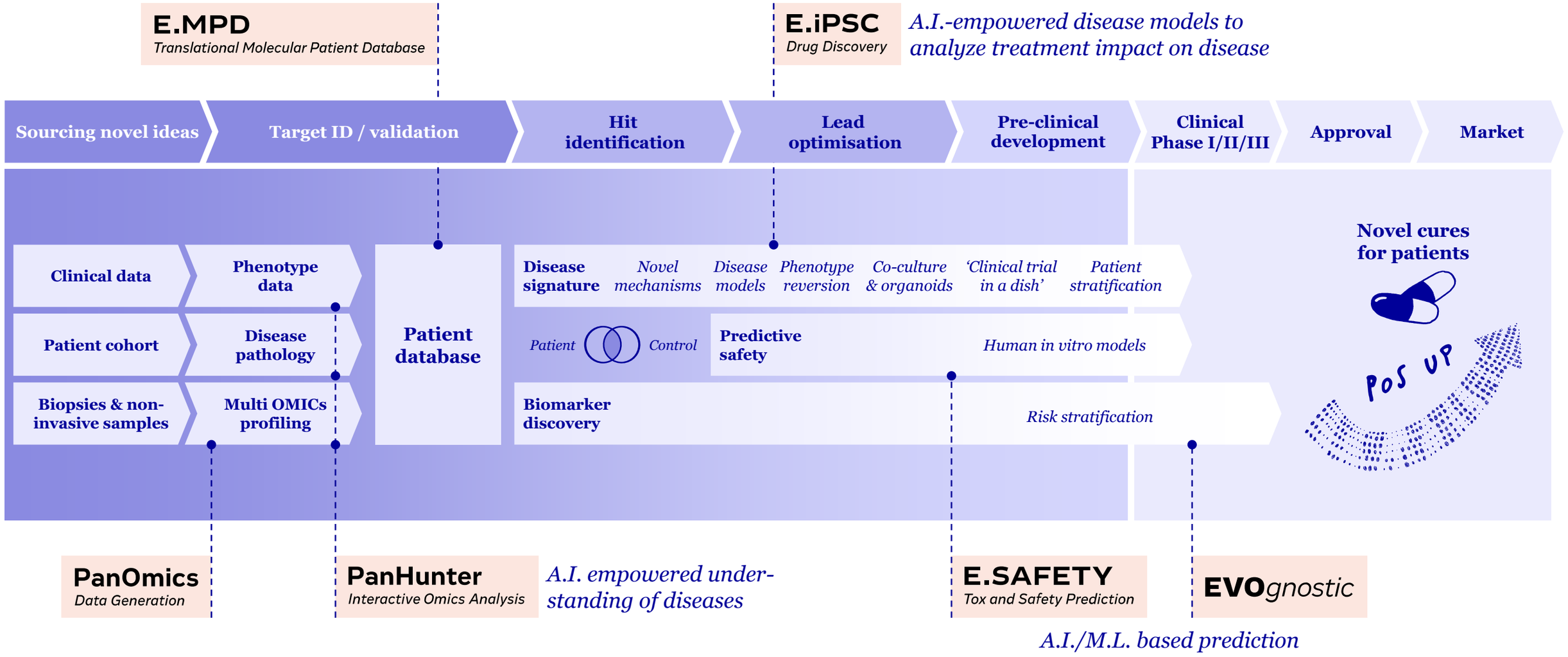
Bristol Myers Squibb™

Industrialised PanOmics approach towards molecular disease insights

Overview of PanOmics-driven drug discovery



POS = Probability of Success

Pipeline building starts with better disease understanding – E.MPD

First in class discovery starts with patient data

Portfolio of Evotec Molecular Patient Databases (E.MPD)

E.MPD Now

Therapeutic Area	Patients
Chronic Kidney Diseases (CKD)	12,000
Immune Mediated Diseases	3,000
Metabolic disease (Liver)	2,000
Healthy Controls	1,500

Next steps

In progress	Patients
Acute Kidney Injury (AKI)	950
Obesity	TBD
Immune, Oncology	TBD
Neuro	TBD
And many more …	

Significant advantages of E.MPD over public domain datasets

Standard technology, data QC and rich data annotations to improve outcomes

		Public Domain	E.MPD TRANSLATIONAL MOLECULAR PATIENT DATABASE
Cohort planning/design	Physician engagement	○	●
	Prospective and longitudinal studies	◔	●
Clinical data	Sample ID linked to source data (e.g. hospital)	○	●
	Sample tracking (batch effects!)	○	◕
	Medical records	○	◕
	Evotec QC of medical record data	◔	●
	Number of annotations (age, sex, medication, comorbidities, …)	1-5	50-500
Analysis data	OMICS technology platform	several, no control	one, fully validated
	Availability of multi-omics data sets	◔	◕
	Data acquisition (sensitivity, sequencing depth, …)	◑	●
	Data comparability (combining cohorts)	◔	●

Re-defining patients' health and disease

E.MPD, **PanOmics** and **disruptive computational technologies** increase disease insight

Thousands of samples → **Billions of data points** → **PanOmics & PanHunter & EVO*gnostic*** → **Modality agnostic analysis** → **Develop 1st in class treatments**

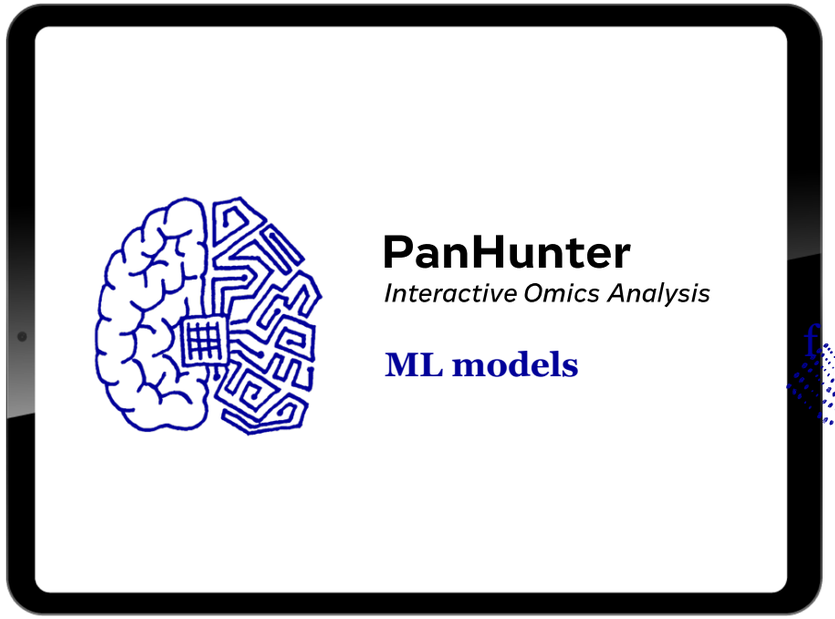
E.MPD
TRANSLATIONAL MOLECULAR PATIENT DATABASE

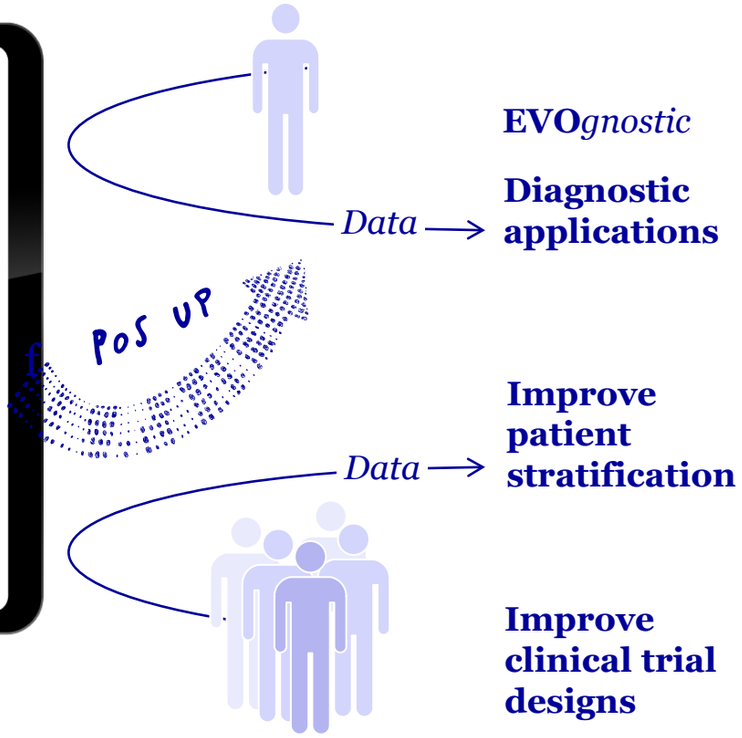
Patient cohorts

Physician Network

Clinical data
Comorbidities, Histology, Diagnosis, Organ function, Blood chemistry, BMI…

PanOmics
Transcriptomics, Proteomics, Metabolomics, Exome Seq, SNPs…





Transformative outcomes leading to new alliances

3 Parallel value-chains to maximize "return on investment" for our partners

PanOmics & E.MPD Discovery today

Internal R&D Pipeline

Internal Discovery

- Reach inflexion point
- Partnering
- Outlicensing

EVO*gnostic* & Disease markers

Innovative new mol ecular diagnostics

Molecular markers of disease progression

Partnered Discovery Pipeline

Top 5 Pharma partners

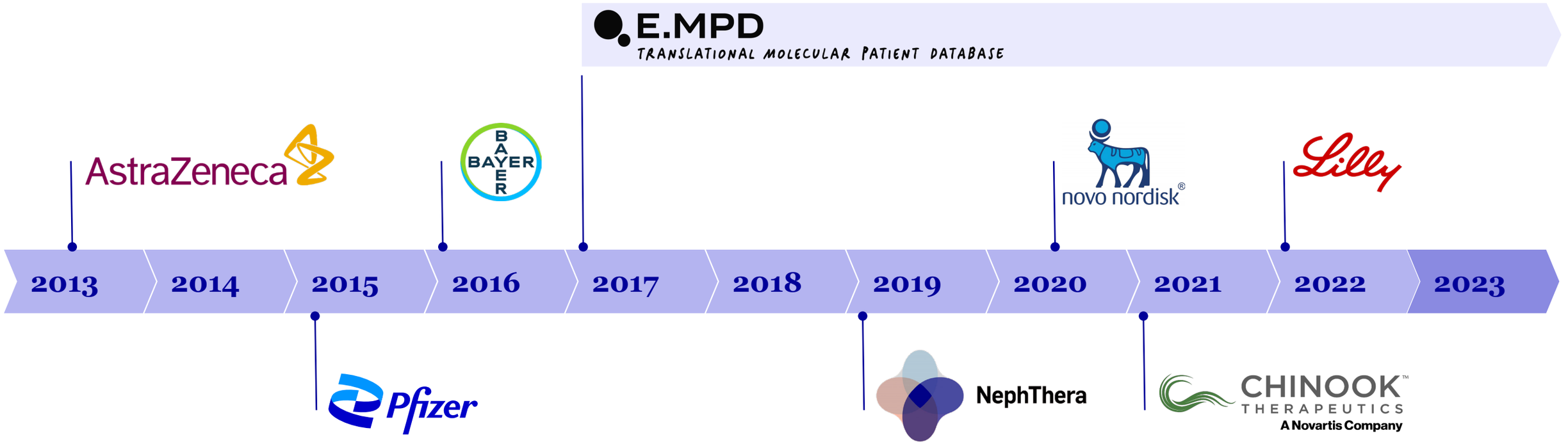
- Joint Discovery Pipeline
- Milestones incentives
- Royalties

Our Partners

- Shared vision on **PanOmics** & **Molecular Patient Databases**
- Shared vision on **clinical development**
- Shared vision on **value-creation for Patients** and stakeholders

7 partnering deals alone in Kidney Diseases

Value creation with limited investments



Typical terms

- Upfront: € 1.5 – 6 m
- Milestones: € 100 to 280 m
- Royalties: 2 to 10%

UoB: University of Bristol; QUOD: Quality in organ donation; NephSyn: Nephrotic syndrome cohort; E.MPD: Evotec's translational patient database

E.MPD expansion creates new opportunities

PanOmics-driven molecular disease understanding benefits **all key therapeutic areas**

E.MPD
TRANSLATIONAL MOLECULAR PATIENT DATABASE

Kidney diseases

Liver disease

Inflammation

Fibrosis

Oncology

Neuro-inflammation

Infectious Diseases

- Unmet medical needs in Kidney diseases, acute & chronic
- Prospective longitudinal studies
- Pre-disease / early-stage disease cohorts

- Access to **Liver fibrosis** patient cohorts
- Access **Cardiovascular patient** cohorts
- Access to **Inflammatory & Autoimmune** diseases

- Access to **Oncology** & **Neuroinflammation** space
- Studies for effective treatment monitoring in **Tuberculosis**
- Cohort studies to understand **Acute Respiratory Distress Syndrome** (ARDS)

Internal R&D pipeline for developments TOGETHER with partners

An innovative portfolio complementing current kidney diseases Standards of Care

A portfolio with a clear value proposition …

- Focus on biological mechanisms not targeted by standard-of-cares (eg SGLT2i, GLP/GIP agonists, MCR antagonists)
- Positioned for **Large indications** or **Rare diseases**
- **Opportunities for extension** in Cardiac, Liver, Pulmonary and Immune diseases

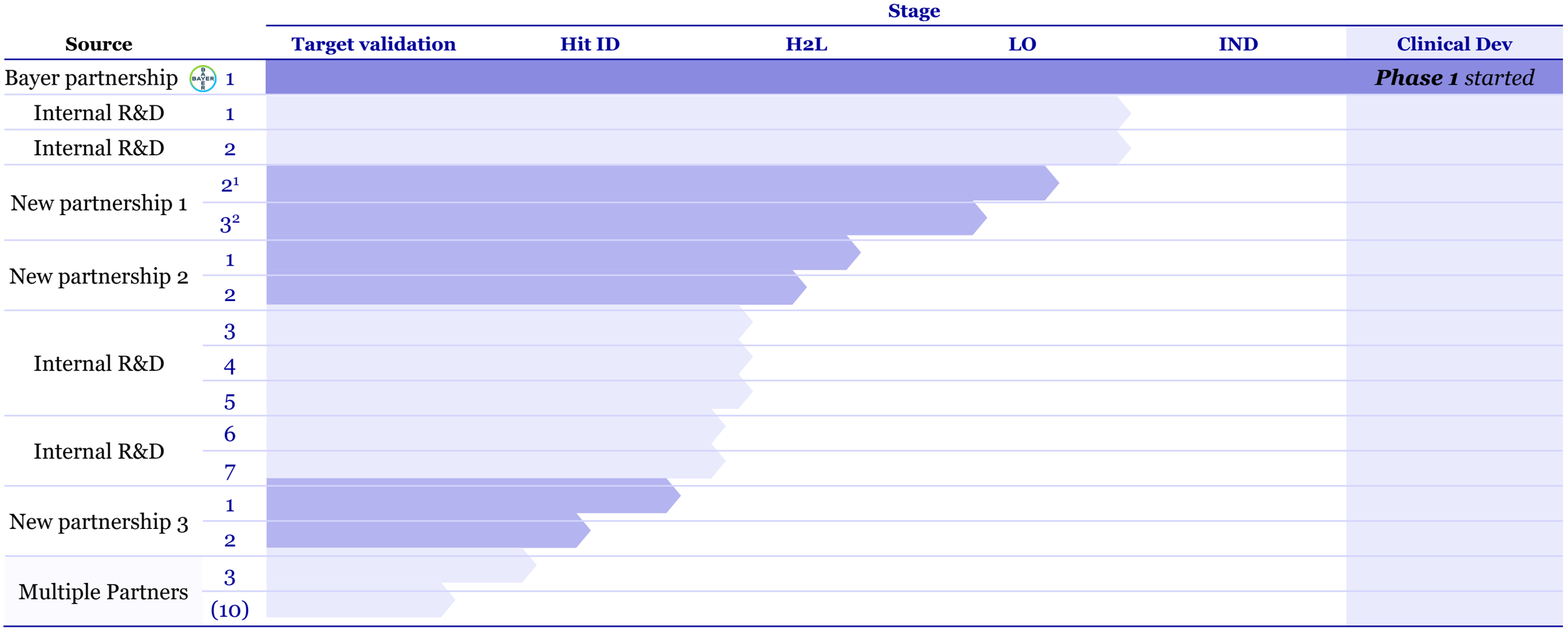
… grounded in high-quality science

- Targets validated in Evotec's Molecular Patient Database (E.MPD) > **10k CKD patients**
- Progressed using most relevant Kidney assays
- **iPSC-derived** models including **3D organoids**
- Comprehensive panel of ***in vivo*** **models**

Potential indications	Target	Target ID	Target Validation	Hit ID	Hit to Lead	Lead Opt.	IND
DKD, Lung, fibrosis	Target 1	Small Molecule					
FSGS, AKI, AKI-to-CKD	Target 2	Small Molecule					
DKD, CVD, Metabolic	Target 3	Antisense Oligonucleotide (ASO)[1]					
DKD, CVD, Metabolic	Target 4	Small Molecule					
DKD, CVD, Liver fibrosis	Target 5	Small Molecule					
Early discovery E.MPD							

Pipeline delivers first clinical candidates – more to come

> 25 active programs due to deliver MS payments in mid-to-short term



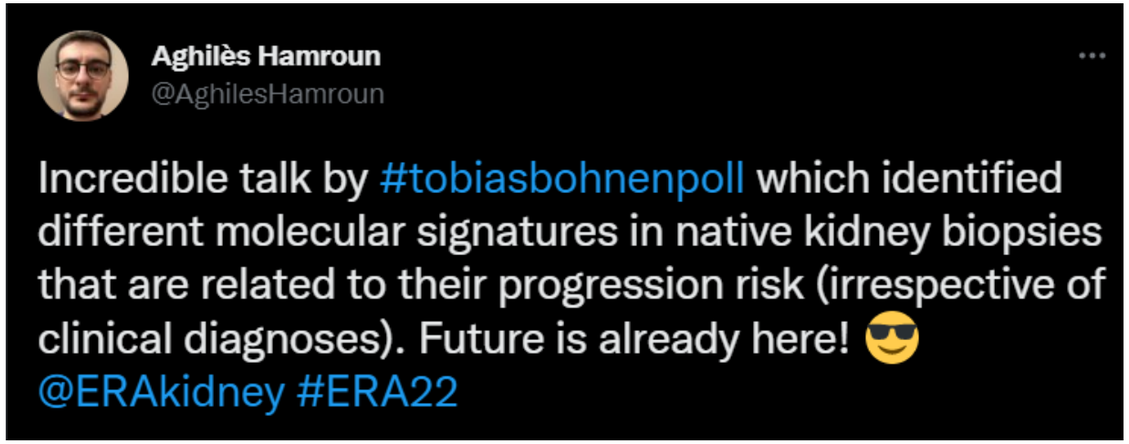
1 Lung disease
2 Inflammation / pain

PanOmics & E.MPD driven Discovery publicly recognized by peers

"The Future is Now"

"A Systems Nephrology Framework for the Molecular Classification of Chronic Kidney Diseases"

- Oral presentation at the 59th ERA Congress in Paris (May 20, 2022)
- 5 more communications at the American Society for Nephrology (Nov 2023)



CHINOOK™ THERAPEUTICS
A Novartis Company

evotec

ERA
LEADING EUROPEAN NEPHROLOGY

ASN
American Society of Nephrology

Better pipeline building needs better patient stratification – EVOgnostics

Identification of disease markers leading to new alliances

The EVO*gnostic* value chain

PanOmics & E.MPD Discovery now

Internal R&D Pipeline

Internal Discovery

- Reach inflexion point
- Partnering
- Outlicensing

EVO*gnostic* & Disease markers

Innovative new molecular diagnostics

Molecular markers of disease progression

Partnered Discovery Pipeline

Top 5 Pharma partners

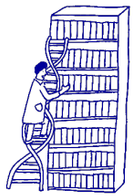
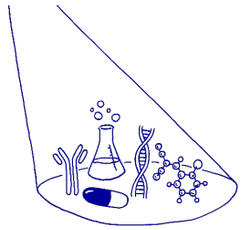
- Joint Discovery Pipeline
- Milestones incentives
- Royalties

Our Partners

- Shared vision on **PanOmics** & **Molecular Patient Databases**
- Shared vision on **clinical development**
- Shared vision on **value-creation for Patients** and stakeholders

PanOmics driven diagnostics[1] from target identification to the clinic

Capabilities for accurate patient stratification driving personalised drug discovery

	Diagnostic Panels (EVO*gnostic* Disease Focus)			**Patient Stratification and Biomarker Discovery (EVO*gnostic* Tools)**	
	Partnered In-Vitro Diagnostics	Laboratory Development Test	Evotec Molecular Patient Database (E.MPD)	Biomarker Discovery	From target ID to Clinical Trial Design
					
EVO*gnostic* Products	**Partnered development of IVD test kits, Licensing**	**Biomarker panels enabling LDT based testing, Licensing**	**Partnering/Service on data sharing and content inquiries**	**Biomarker discovery for early drug development**	**A.I./ML-driven patient stratification for better Drug Discovery**

A comprehensive PanOmics driven diagnostic toolbox
to successfully develop the right drug for the right patient at the right time

1 for research use only
A.I.: Artificial Intelligence; ML: Machine Learning

Understanding complex diseases requires better diagnostics

Autoimmune diseases with connective tissue involvement (CTD)

Heterogeneous disease populations

with similar disease specific drivers and immune mechanisms

Rheumatoid Arthritis

- **A most common IMID** (0.5% global prevalence)
- **Inflammation of small and large joints**

Systemic Lupus Erythematosus (SLE)

- **~5 Mn people globally** affected
- **Inflammation of connective tissue**

Sjögren's syndrome

- **0.4-3 Mn people globally** affected
- **Affecting salivary and lacrimal glands**

ANCA Vasculitis

- **4.6–42.1 cases/100 000 individuals/year**
- **Inflammation of blood vessel walls**

EVO*gnostic* addressable unmet needs

Early and accurate diagnosis to avoid organ involvement

Better treatment and disease progression monitoring

Applying a comprehensive panOmics driven diagnostic toolbox to complex disease populations to improve treatments

IMID: Immune mediated diseases

PanOmics driven diagnostics[1] to improve treatment selection

Case Study 1*: Understanding complex autoimmune diseases - Vasculitis

Harold Ramis (“Ghostbuster”), died from Vasculitis complications four years after diagnosis

Vasculitis

- an autoimmune multi-systemic inflammatory vessel disease
- complex to diagnose and easily misdiagnosed
- risk of severe long-term implications

- Chest pain[2], malaise and anorexia
- Elevated creatinine levels
- Suspected to have pneumonia
- Persisting symptoms for several weeks

Diagnostics	Treatments
Physical exam *Blood and urine test* *Chest CT*	Antibiotics against suspected Pneumonia
Failed	
Extensive exam *Blood and urine chemistry* *Chest CT* *Invasive kidney biopsy*	Corticosteroids Chemotherapy (B-cell depletion therapy)

*The study cases described are fictious for the purpose of illustration of the impact of disease on patients today.
1 for reasearch use only
2 A case of ANCA associated vasculitis in a patient presenting with chest pain - PMC (nih.gov)

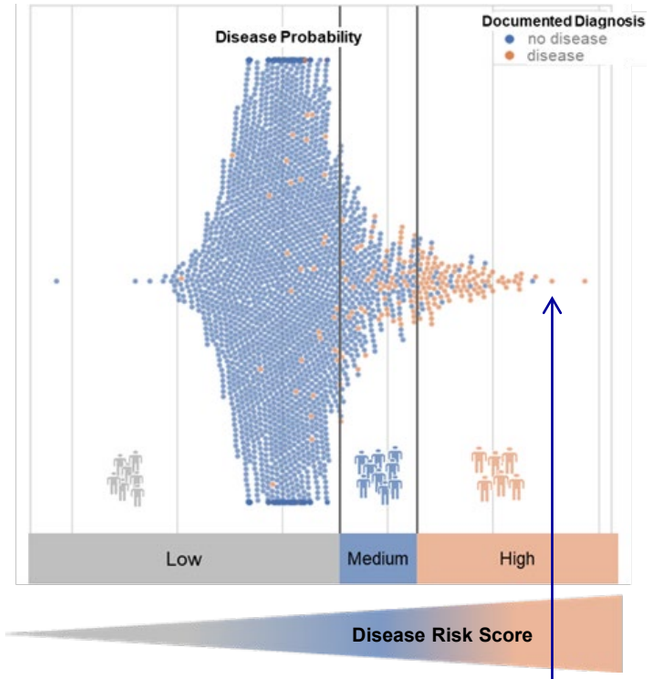
PanOmics-driven diagnostics to improve treatment selection

PanOmics combined with ML to improve diagnosis and treatment

One blood sample per patient

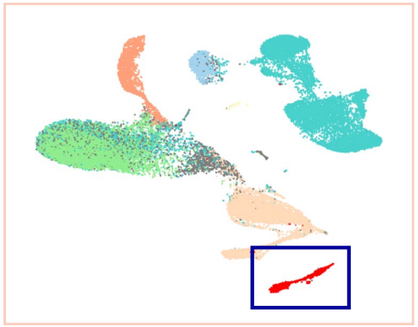
EVO*gnostic* Kidney Health-to-disease map

Patient stratification based on machine learning of PanOmics results from 2000 patients



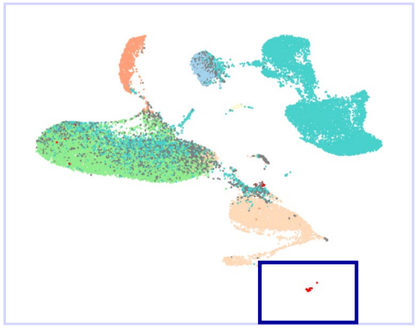
High resolution of a blood sample down to individual blood cells

PanOmics at the single cell level



At diagnosis:

B cells driving disease



Under B-cell depletion therapy:

Depleted B cells under therapy

A single PanOmics test of a blood sample positions a patient on the map for probability of Vasculitis disease

and provides disease understanding at the molecular level for treatment monitoring

ML: Machine Learning

PanOmics driven prognosis for better disease management

Case study 2*: Understanding complex autoimmune diseases – Systemic Lupus Erythematosus (SLE)

Selena Gomez, diagnosed with SLE, received kidney transplant in 2017

Systemic Lupus Erythematosus (SLE)

- an autoimmune disease with multi-systemic manifestation
- easily misdiagnosed
- delayed diagnosis can lead to irreversible organ damage

- Unrelenting fatigue, weakened immunity
- Often multi-year journey before SLE diagnosis
- Potential of kidney inflammation and failure / Organ transplantation

Diagnostics	Treatments
Often mild unspecific onset of disease	
Physical exam *Blood and urine chemistry*	Anti-inflammatories
Progression of disease	
Extensive exam *Autoantibody-Tests* *Disease monitoring by disease activity index (**SLEDAI**)* *Invasive skin and kidney biopsy*	Immuno-suppressants In severe cases: Dialysis Kidney Transplantation

- The study cases described are fictious for the purpose of illustration of the impact of disease on patients today
- SLEDAI – Systemic lupus lupus erythematosus disease activity index – global disease score tool that evaluates the lupus erythematosus disease activity based on a series of clinical and laboratory variables

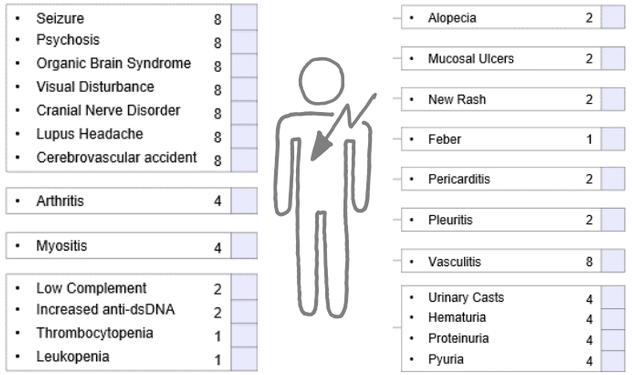
A case of ANCA associated vasculitis in a patient presenting with chest pain - PMC (nih.gov)

PanOmics driven prognosis for better disease management

PanOmics combined with ML to monitor disease activity, improve prognosis and treatment

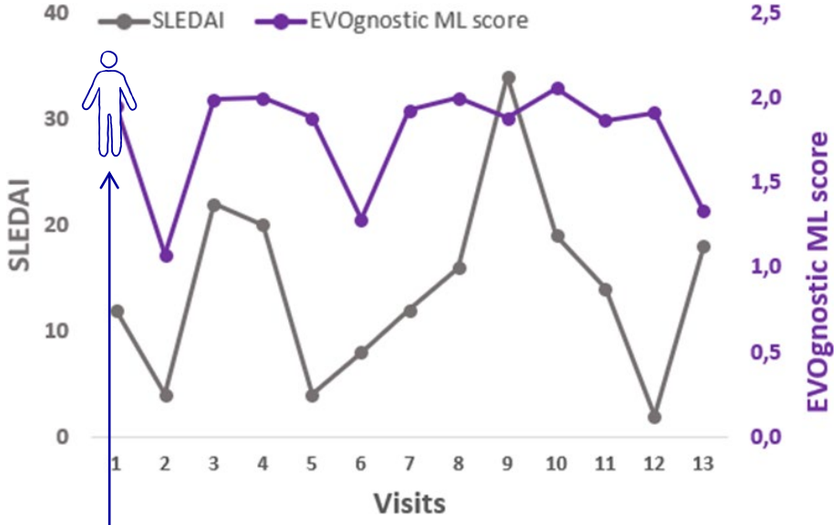
SLE disease activity index (SLEDAI)

Today a weighted diagnostic metric of 24 components is used to measure disease activity



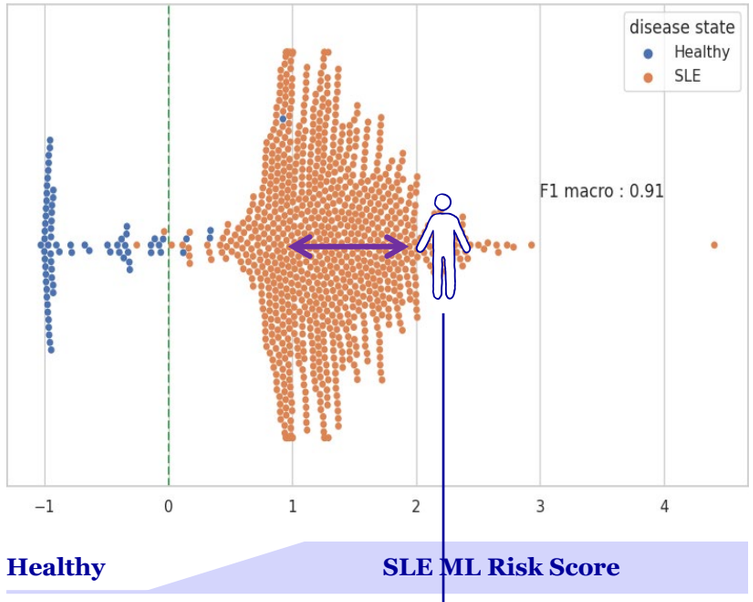
EVO*gnostic* disease score reflects disease flares

SLE patient monitored over 13 visits.
The patient had two flares (Visit 3-5 and 8-12).



EVO*gnostic* SLE Health-to-Disease Map

Assessment of disease progression based on PanOmics results from one blood sample



A single PanOmics test of a blood sample positions a patient on the map for prediction of disease progression in SLE

Multiple opportunities …just at the beginning

Health-to-Disease Maps and biomarker discovery

Patient cohorts

E.MPD
TRANSLATIONAL MOLECULAR PATIENT DATABASE

Kidney diseases
Immune-mediated diseases
Liver disease
Inflammation
Fibrosis
Oncology
Neuro-inflammation
Infectious Diseases
Healthy controls

Physician Network

PanOmics and ML

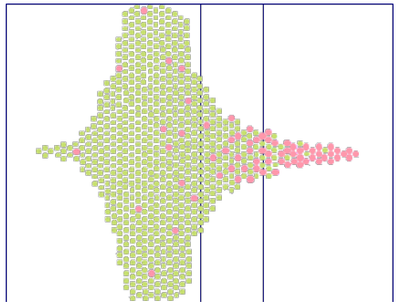
PanOmics data

Clinical data

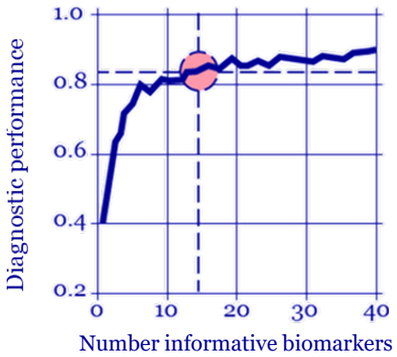
Machine Learning (ML)

Patient Stratification

Health-to-Disease Map



Biomarker Discovery



Evotec Opportunities

EVOgnostic - Evotec's panOmics driven diagnostics is a comprehensive toolbox to successfully develop the right drug for the right patient at the right time

- A.I./ML driven accurate patient stratification for better drug discovery with **pharma partners**
- Biomarker panels enabling partnerships with the **diagnostic industry and clinical laboratories**
- Companion diagnostics driving precision medicine in complex diseases e.g. kidney, cardiovascular and autoimmune diseases with **pharma and diagnostic partners**

Better pipeline building needs advanced disease modelling

A cure for Leah

Case study: Amyotrophic lateral sclerosis (ALS)

Leah

- Amyotrophic lateral sclerosis (ALS)
- Age 30
- First symptoms at 25
- Diagnosed at 27, bound to wheelchair since age of 28
- Prognosis: 2-5 year life expectancy
- Formed not-for profit network ‘Her ALS Story’[1]

1 About HAS – Her ALS Story

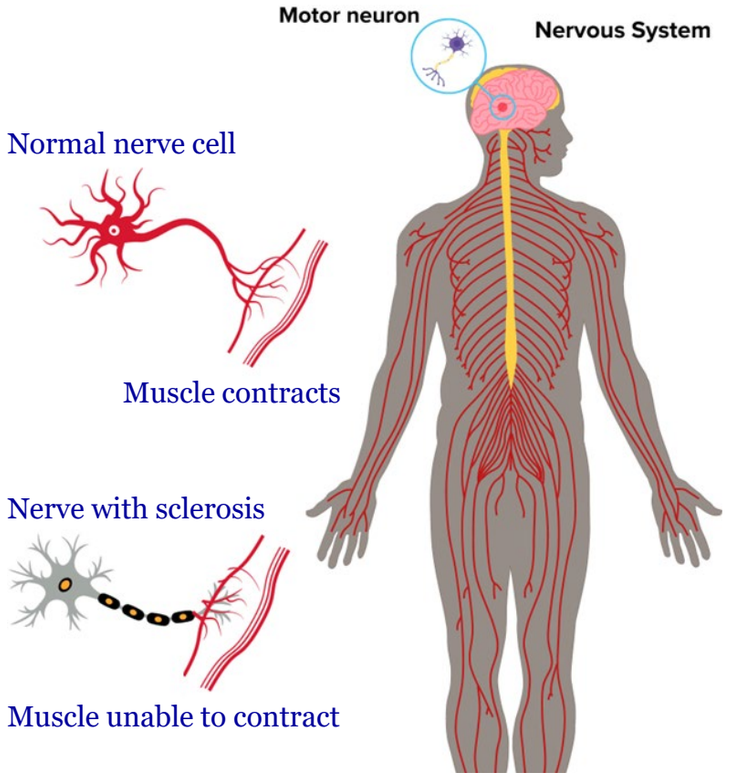
Ice Bucket Challenge in 2014 to raise awareness for ALS[1]

ALS, amyotrophic lateral sclerosis, also known as motor neuron disease or Lou Gehrig's disease

1 The challenge was co-founded by Pat Quinn and Pete Frates to encourage donations for ALS research and it went viral on social media during July–August 2014.
Evotec accepts icebucket challenges Evotec Accepts ALS Ice Bucket Challenge - YouTube

ALS is a fatal neurodegenerative disease with high unmet medical need

Causes the brain to lose connection with the muscles



Amyothrophic lateral sclerosis (ALS)

- Rapidly progressing disease caused by death of motor neurons
- Motor neurons control voluntary muscle movement and breathing
  - Survival is typically only 2-5 years from symptom onset[1]
  - ~75k[2] diagnosed prevalent patients worldwide (2022), expected to increase to ~80k (by 2030)
  - Limited treatment options
  - No known cure to stop or reverse ALS

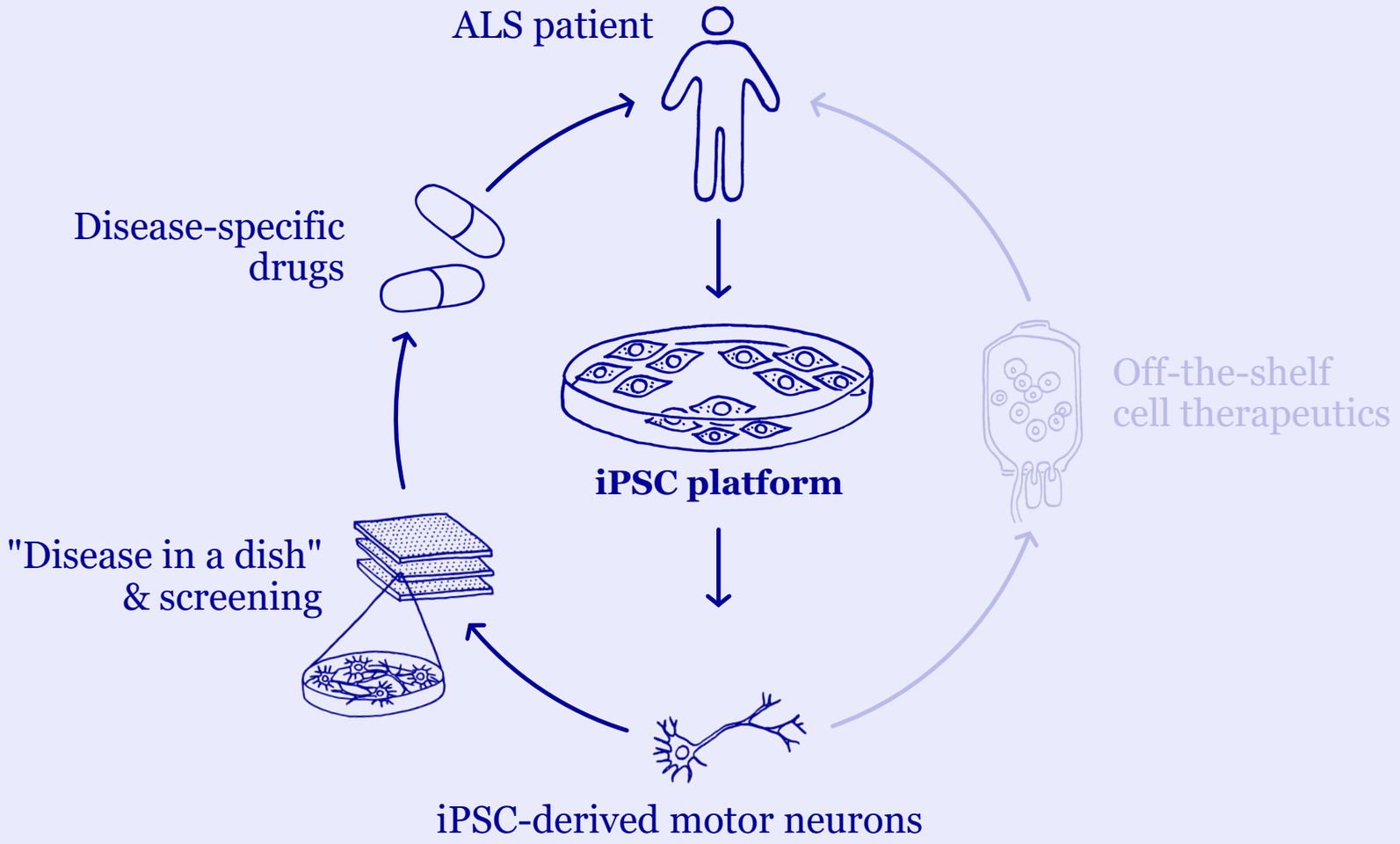
High failure rates in ALS clinical trails due to overreliance on non-physiological ALS mouse models.
→ strong need for better representation of disease with human cellular models for improved clinical translatability.

1 Masron et al, Eur J Neur 2020
2 Citeline ALS report

From humans for humans

iPSC-based drug discovery

E.iPSC –
Human disease
relevant modelling



**iPSC-based
off-the-shelf
therapeutics**

Our first iPSC program dedicated to discovery of new ALS treatments

Established protocol for ALS patient derived iPSC motor neurons in collaboration with HSCI

evotec

NEWS RELEASE

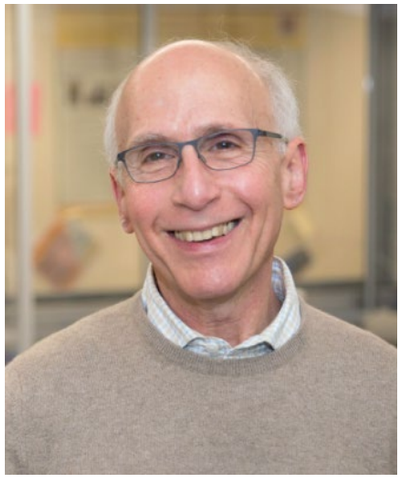
12 September 2013

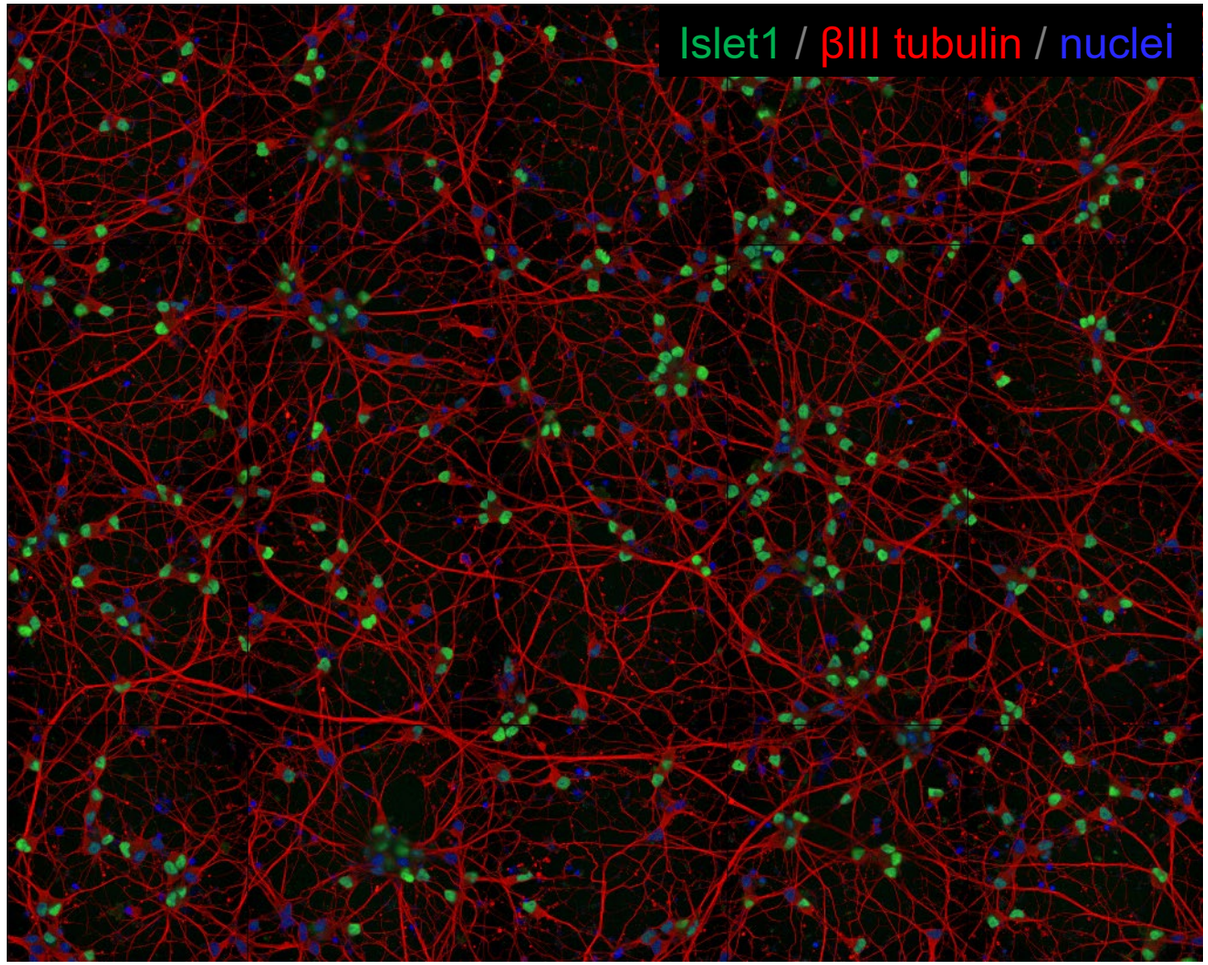
'RESEARCH NEVER STOPS' *info@evotec.com* | *www.evotec.com*

Evotec and Harvard Stem Cell Institute form Cure*MN* collaboration to advance ALS research

Prof. Kevin Eggan

Prof. Lee Rubin



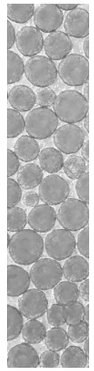


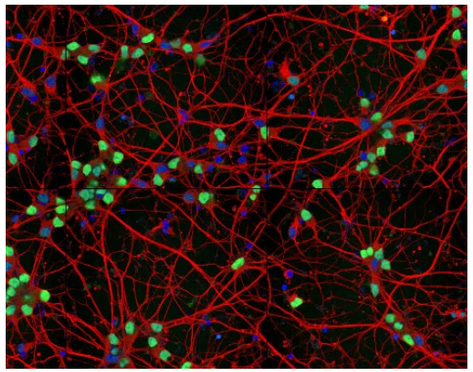
Taking iPSC to an industrial level for large scale drug discovery

Highly scalable and automated laboratory workflows

Industry scale

- High quality iPSC and iPSC-derived cells
- Optimized protocols in 2D & 3D
- Strict QC
- Upscaling for high throughput (high reproducibility)



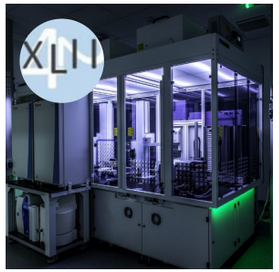


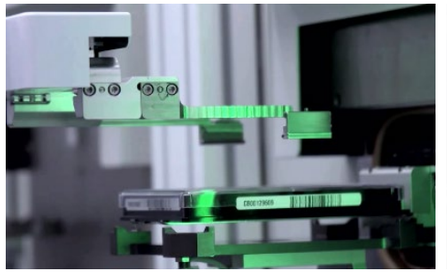
Automated workflows

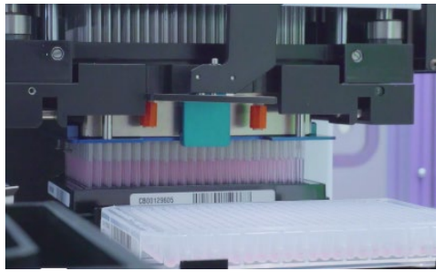
- Sterile long-term culture
- High throughput drug screening

> 20 drug discovery programs

1st IND in clinical development since 2021



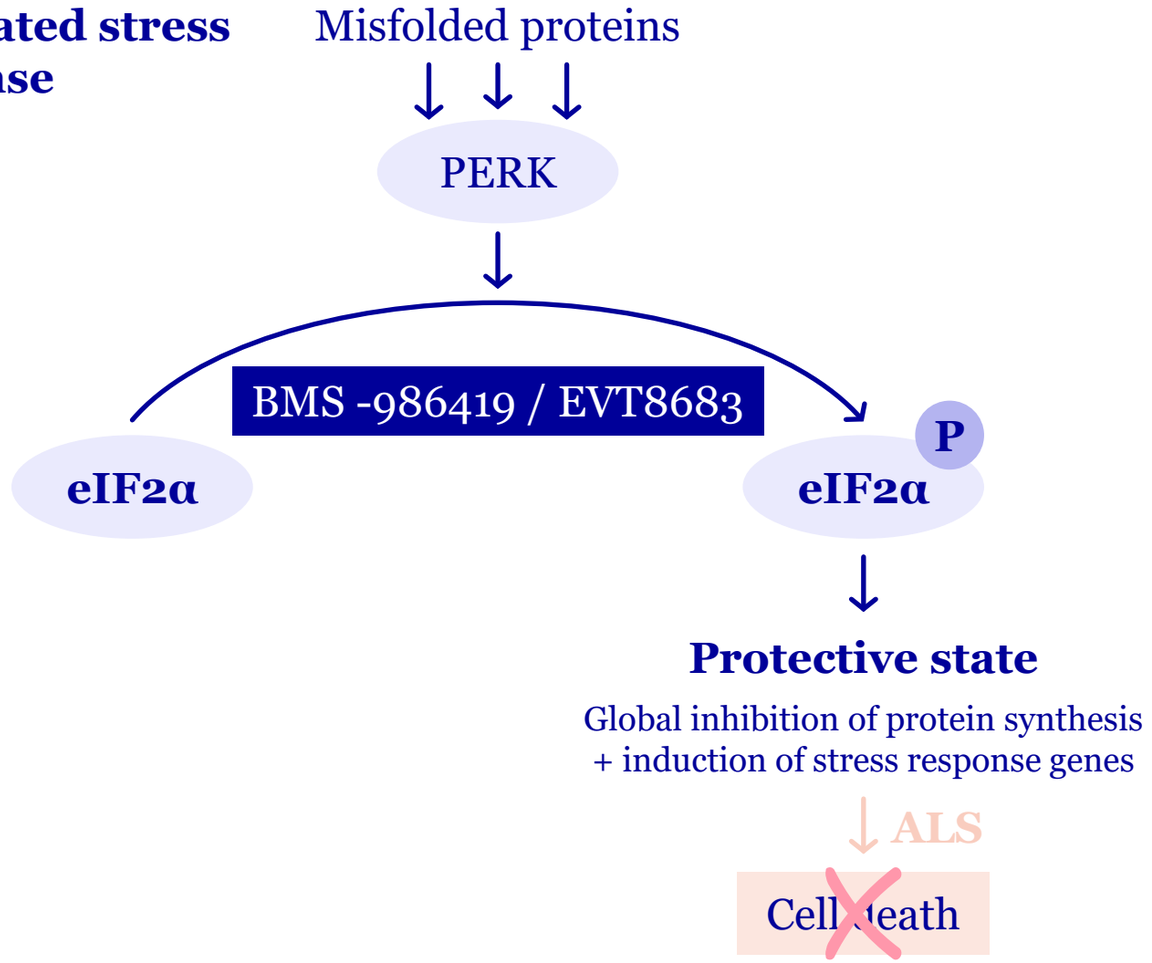




BMS-986419* restores normal Integrated Stress Response (ISR) function

Chronic activation of ISR in ALS disease can lead to cell death

Integrated stress response



- The eIF2 complex is an ISR[1] "master regulator" that becomes dysfunctional in chronic disease: chronic stimulation of ISR leads to cell death
- We established *in vitro* model with iPSC-derived motor neurons recapitulating chronic stress

- Phenotypic screening in iPSC-derived motor neurons identified ISR[1] modulator
- **BMS-986419 / EVT8683** binds to a subunit in the eIF2 complex (eIF2B) restoring normal protein clearance and cellular homeostasis

ISR (= Integrated stress response); *EVT8683

Potential across a range of neurodegenerative conditions

eIF2B activator (BMS-986419 / EVT8683) is moving into a Phase II trial in ALS

Misfolded protein accumulation & evidence of ISR activation present in multiple neurological conditions[1]

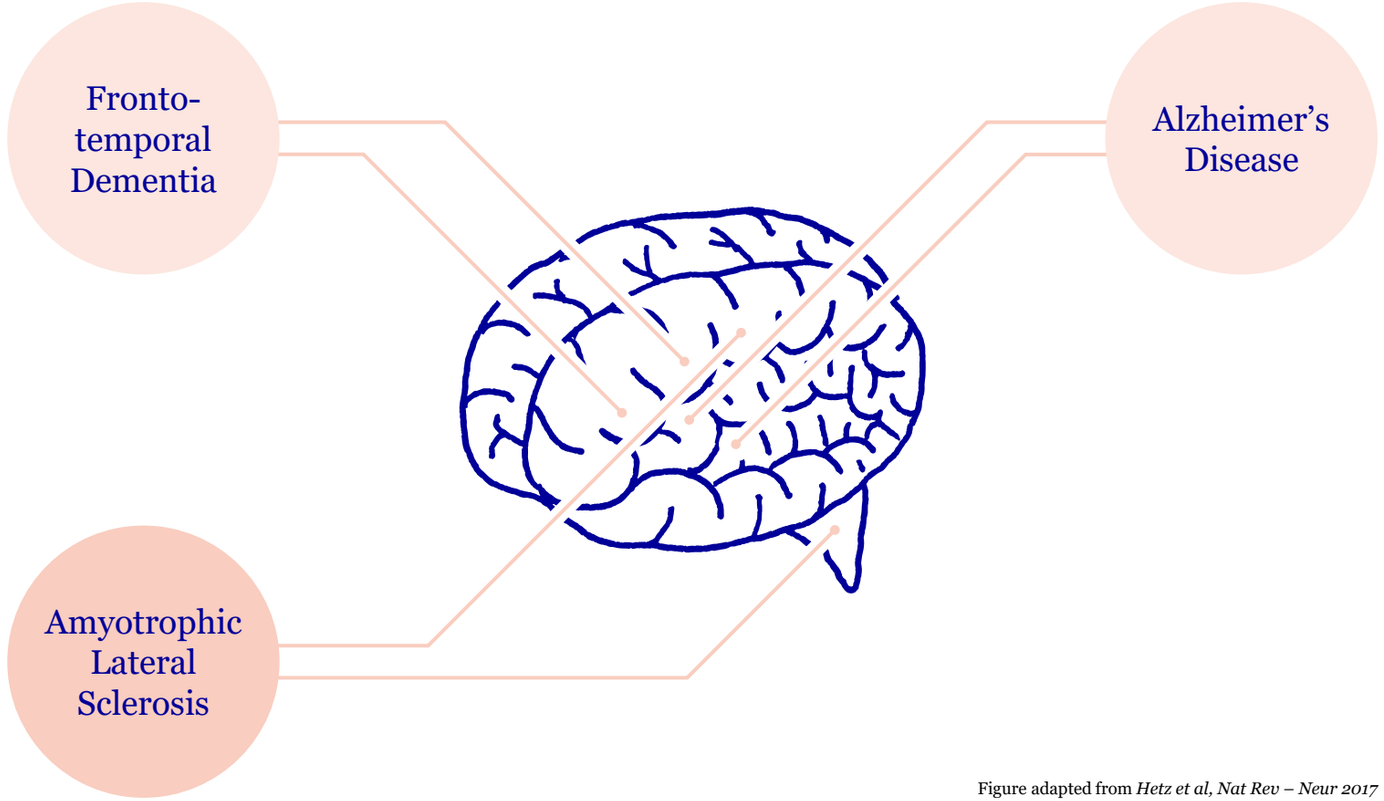


Figure adapted from *Hetz et al, Nat Rev – Neur 2017*

BMS-986419 / EVT8683

- Safe and well-tolerated in Phase I clinical study in healthy volunteers[2]
- Potential opportunity as monotherapy or combinations
- **Phase II study in ALS initiating in 2024**

1 Hetz et al, Nat Rev – Neur. 2017
2 PI SAD/MAD = Phase I clinical study in healthy volunteers with single ascending dose portion (SAD) and multiple ascending dose portion (MAD)
ISR: Integrated Stress Response

A growing portfolio of iPSC models to tackle more diseases

Ongoing collaborations and opportunities leveraging our PanOmics drug discovery platform

"Our unique combination of disease & platform expertise provides the basis for our success."

	Therapeutic area	iPSC model	Indication	Partner & status	
Partnered	Neurodegeneration & inflammation	Neurons, astrocytes, microglia, co-cultures	AD, PD, ALS, …	Partnered in 2016, >20 projects at different stages, first IND in clinic since 2021	
	Eye diseases	RPE	AMD	Partnered in 2022, Hit validation stage	Boehringer Ingelheim
Internal R&D	Psychiatric disease	Neurons, astrocytes, microglia, co-cultures	SCZ, MDD, …	**Next Collaboration opportunities**	
	Eye diseases	Photoreceptors, retinal organoids	Diabetic retinopathy, glaucoma, …		
	Kidney diseases	Podocytes PTECs Kidney organoids Ureteric bud organoid[1] Immuno-Kidney organoids[1]	DKD, AKI, CKD, ADPKD, TOX/Safety, …		
	Metabolic diseases	Hepatocytes Liver organoids	NASH/MASH/TOX/Safety, …		
	Cardiovascular disease	Cardiomyocytes Cardiac microtissues	Dilated cardiomyopathy, TOX/Safety, …		
	Inflammation & Immunology	Macrophages Tregs[1]	Chron's, IPF[2], … AIDs[3]		

1 Planned for 2024
2 Potential TAs: fibrotic diseases impacting liver, lung (IPF), kidney, heart, intestine (IBD), skin
3 AID = autoimmune disease; Potential TAs: Rheumatology (RA, lupus), Gastroenterology (IBD, UC, CD, NASH), Dermatology (AD, psoriasis), Pulmonology (IPF, ILD, COPD), Nephrology (CKD, SLE)

From humans, for even more humans

More and more disease models to come

Unravelling complex disease - E.MPD -

Cross-comparison

Molecular patient database

AI-empowered understanding of disease pathology

Cross-comparison

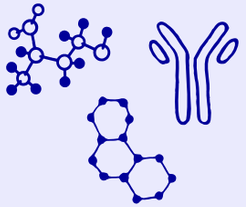
Exploring disease biology at scale - E.iPSC -

Relevant iPSC models

- Modelling human disease pathology *in vitro*
- Highly scalable and automated workflows

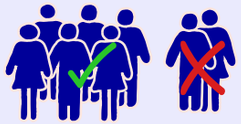
Discovery of novel therapeutics

- Modality agnostic: Small molecules, degraders, ASOs, antibodies
- Validation of complex disease pathology with co-cultures or 3D iPSC models



'Clinical-trial-in-a-dish'

- Validate across diverse patient genotypes
- Potential to stratify patients based on drug responsiveness of their iPSC models



Fueling diverse program pipelines

Focus on therapeutic areas where we

1) See high unmet medical need, no promising therapies
2) Identify novel disease mechanisms & targets through PanOmics
3) Lack alternate disease models

* includes SNP & Whole genome sequencing (DNA), Transcriptomics (RNA), Proteomics (Proteins), Metabolomics

Efficient pipeline building accelerating with A.I.

Strong influence of A.I. on the Pharma/Biotech Industry

Overview of anticipated benefits

Status today

Linear

Precision:
A.I. enables fine-tuning of compound properties for specific applications

Scalability:
Automated processes can handle large-scale production efficiently

Cost Reduction:
Fewer resources are required for R&D and manufacturing

Speed:
A.I. accelerates antibody development, reducing time-to-market

Non-linear

Increase of non-linear “Eureka” events:
A.I. enables enabled findings outside of accessible human logic

Source

Sharing our peer-reviewed cutting-edge research work

Examples of research in the field of A.I./M.L. and High-Performance Compute for Drug Discovery

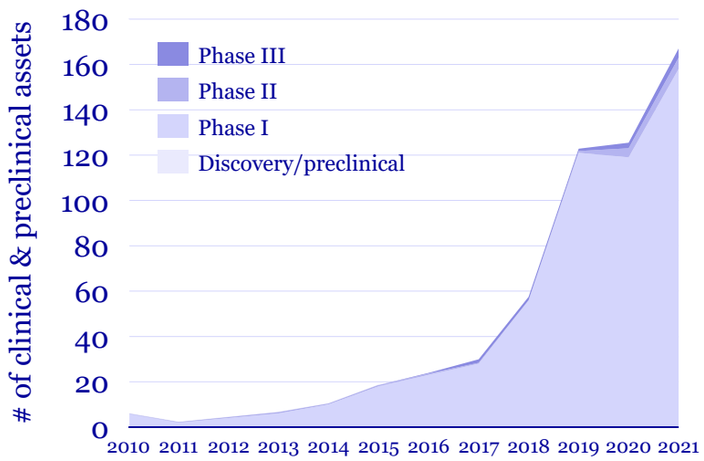
High recognition in scientific community

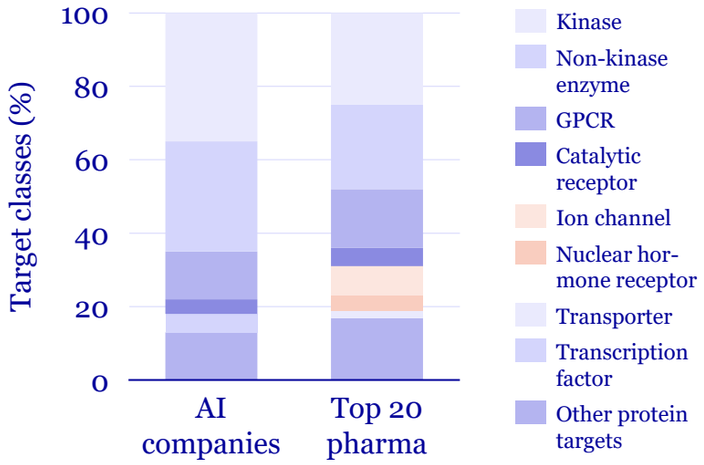
- Two peer-reviewed books produced by Evotec teams on A.I./M.L. algorithm and HPC for A.I./M.L., Quantum Computing application to Drug Discovery and Development
- **A.I. in Drug Discovery** book copies sold/ accessed **115,000** times (till Oct2023- Published in 2021)
- **HPC for Drug Discovery and Biomedicine** copies sold/accessed **7,950** times (till Oct 2023-Published in Sept 2023)

Artificial Intelligence in Drug Design, 1-st Ed, Editor: Alexander Heifetz, Methods in Mol Bio., Springer Protocols, ISBN: 978-1-0716-1786-1 Published: 04 November 2021
High Performance Computing for Drug Discovery and Biomedicine, 1-st Ed, Editor: Alexander Heifetz, Methods in Mol Bio., Springer Protocols, ISBN: 978-1-0716-3448-6 Published: 14 September 2023

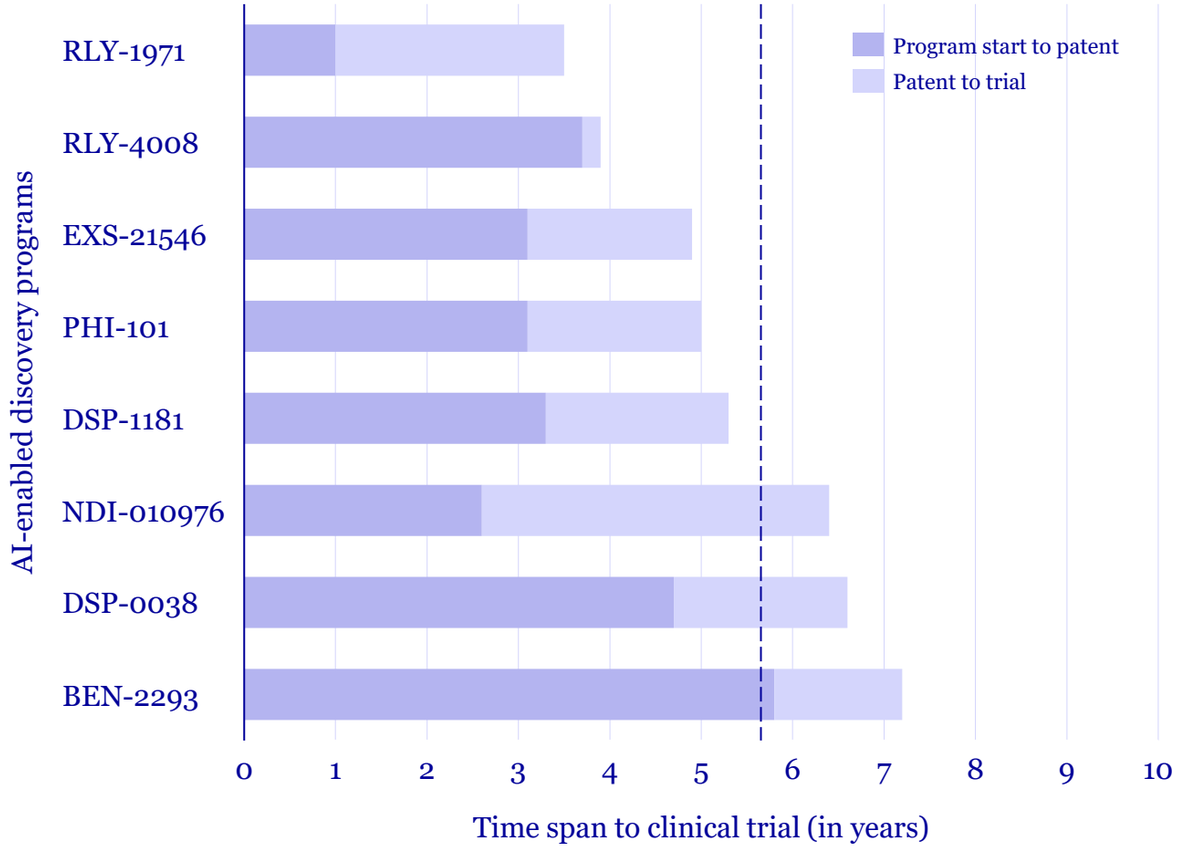
Reduction of time to clinical trials observable, but early days

Outcomes, not only speed matters





Potential to reduce time from bench to clinical trial



Source: AI in small-molecule drug discovery: a coming wave? Nature Reviews Drug Discovery 21, 175-176 (2022) / Paul et al. How to improve R&D productivity: the pharmaceutical industry's grand challenge

Integrated A.I./M.L. throughout the drug discovery value chain

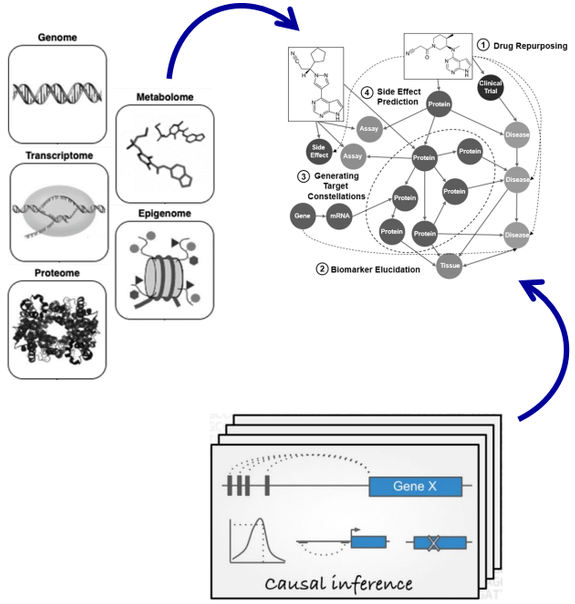
Examples of applications

Target ID / validation | **Hit identification** | **Lead optimisation** | **Pre-clinical tox testing** | **INDiGO** | **Phase I** | **Phase II** | **Phase III** | **Market**

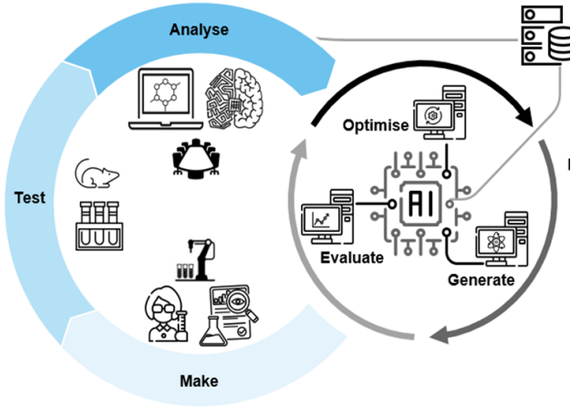
PanHunter

PanOmics data analytics and compound profiling along the full value chain

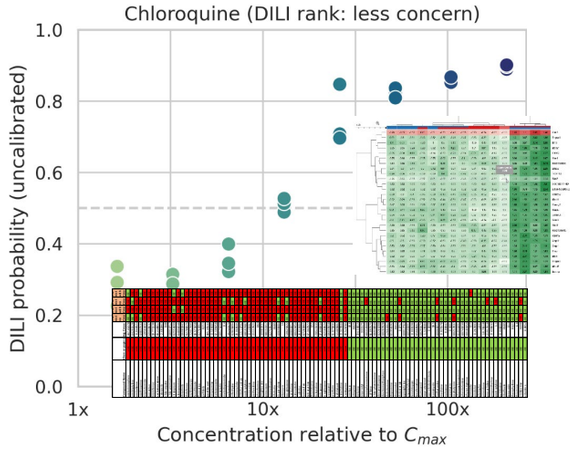
1. Target ID / Validation



2. Hit and Lead Optimisation



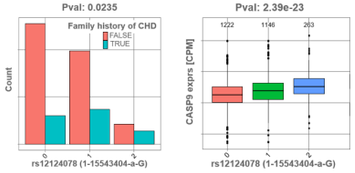
3. Safety prediction



70 → 87% prediction accuracy improvement over current gold standard HCI based DILI platform[1]

4. Patient selection

Patient stratification



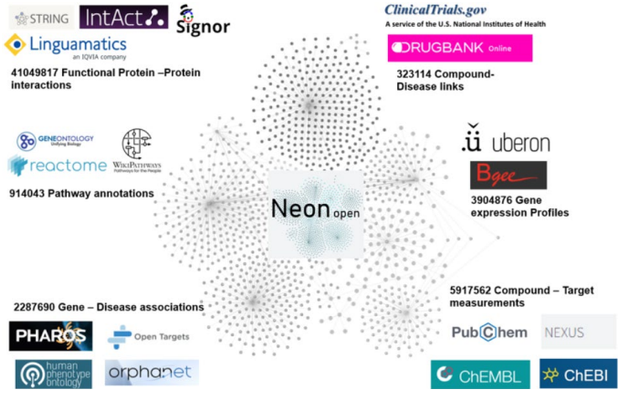
(Automatized bivariate analysis of clinical & genotyping data for a selected cohort of interest)

1 Drug induced liver injury

1. Target ID / Validation with A.I. enabled data mining

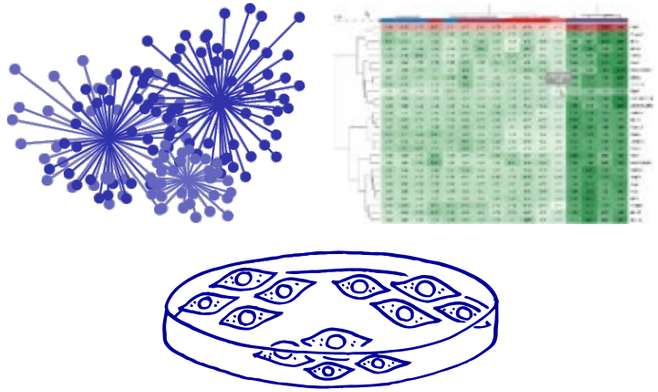
Selection, identification and validation to a ranked compound hitlist using automatic workflows

Target Identification



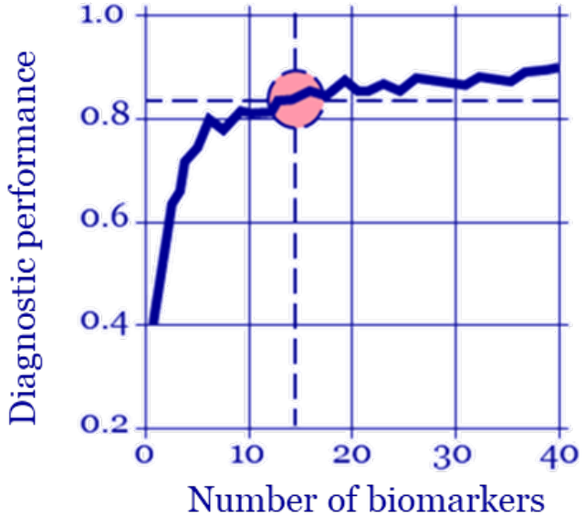
Potential novel target for disease modulation

Target Validation



Selecting Target/screening

Assay Development



Project timeline: 16-20 weeks

- New Target validation
- Aids in identification of new modalities
- Rapid mining of multi-omics datasets

2. Generative A.I. driven Drug Design – reinforcement learning

Small Molecule Generative Design

Starting from Series of Target X inhibitors

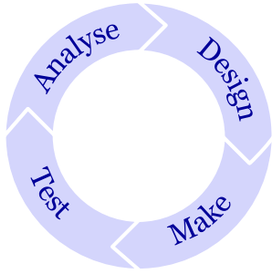
- Compounds not potent enough
- Compounds not in the druggable (Physicochem) space
- Several ADMET issues

A.I. Generative Design

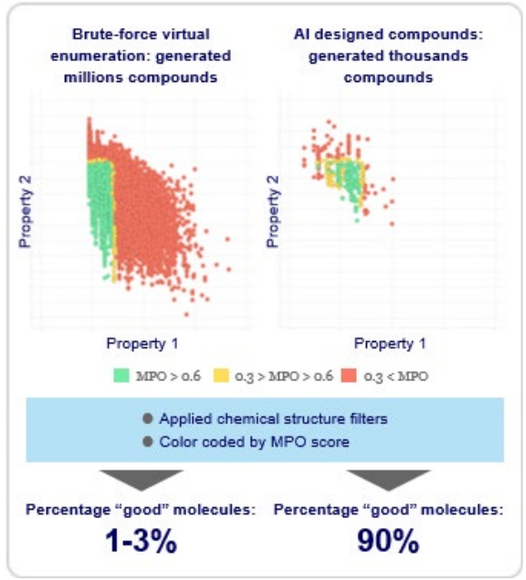
- Reinforcement Learning
- Synthesizability assessment

Novel compound series identified

- Identified **novel series** of Target X inhibitors
- **Increased** potency and bioavailability
- Improved overall **ADMET** properties



Impact on Drug Discovery



- Increased probability of Success to 90%
- Time reduced to 70% (average)

Project timeline: 12 weeks

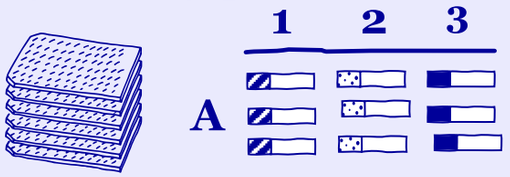
ADMET : Absorption, Distribution, Metabolism, Excretion, and Toxicity

3. Future of Safety Prediction is A.I. and Omics-driven

High-throughput omics towards benefit-risk prediction: safety prediction example

Relevant cellular models → Proprietary safety database → Safety liability modelling

High-throughput omics



Organotypic (human) models

- Improving sensitivity and specificity of safety prediction
- Understanding mechanisms of toxicity

Known toxic compounds

FDA DILI assigned drugs

Reference drugs with adverse organ toxicity

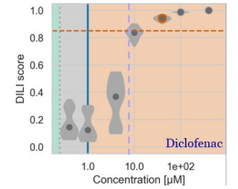
Marketed drugs

Mechanistic compounds & drug properties

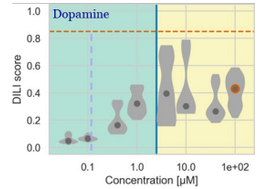
Safety liability modelling

AI/ML predictions of safety liability risk

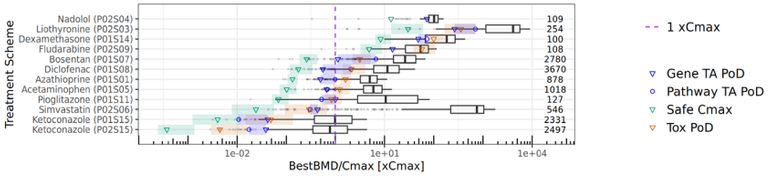
High risk



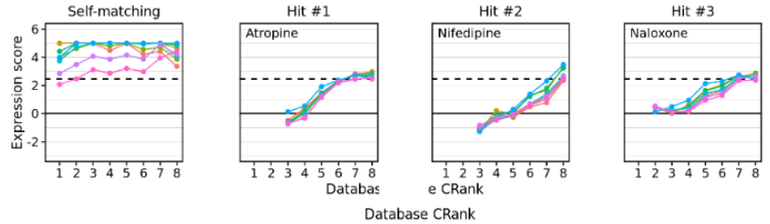
Low risk



Mechanism of action & PoD safe dose prediction



Compound matching to safety database

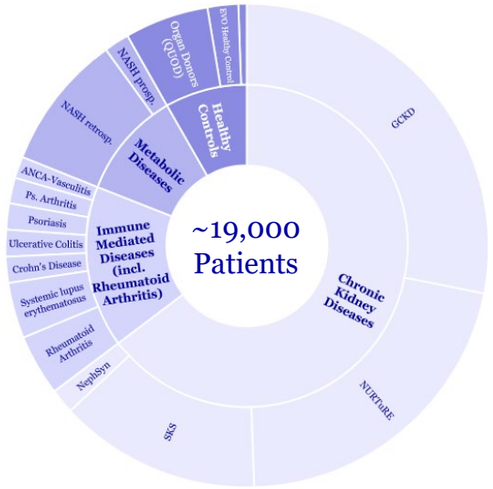


Superior prediction *versus traditional approaches; DILI prediction shown to increase from 70% to 87%*

4 Generative A.I. driven Patient selection

Patient Cohorts

E.MPD
TRANSLATIONAL MOLECULAR PATIENT DATABASE



Healthy controls

Physician Network

A.I./M.L. based Model

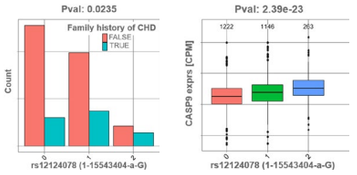
- Use of 'omics' (Tran-scriptomics, sc/snRNA-Seq, Proteomics, Metabolomics, Exome Seq, SNPs) data
- Expert curated clinical/ Phenotypic (Comorbidities, Histology, Diagnosis, Organ function, Blood, Pathology) data
- A.I. model (bidirectional LSTM) training

Validation

- Validate the model (domain experts)
- Review the score and prediction
- Identify cohort-based patient selection

Impact on Drug Discovery

Patient stratification



(Automatized bivariate analysis of clinical & genotyping data for a selected cohort of interest)

- Identification/Selection of Right Patient population
- Enable reduction in size, scope, duration and cost optimisation

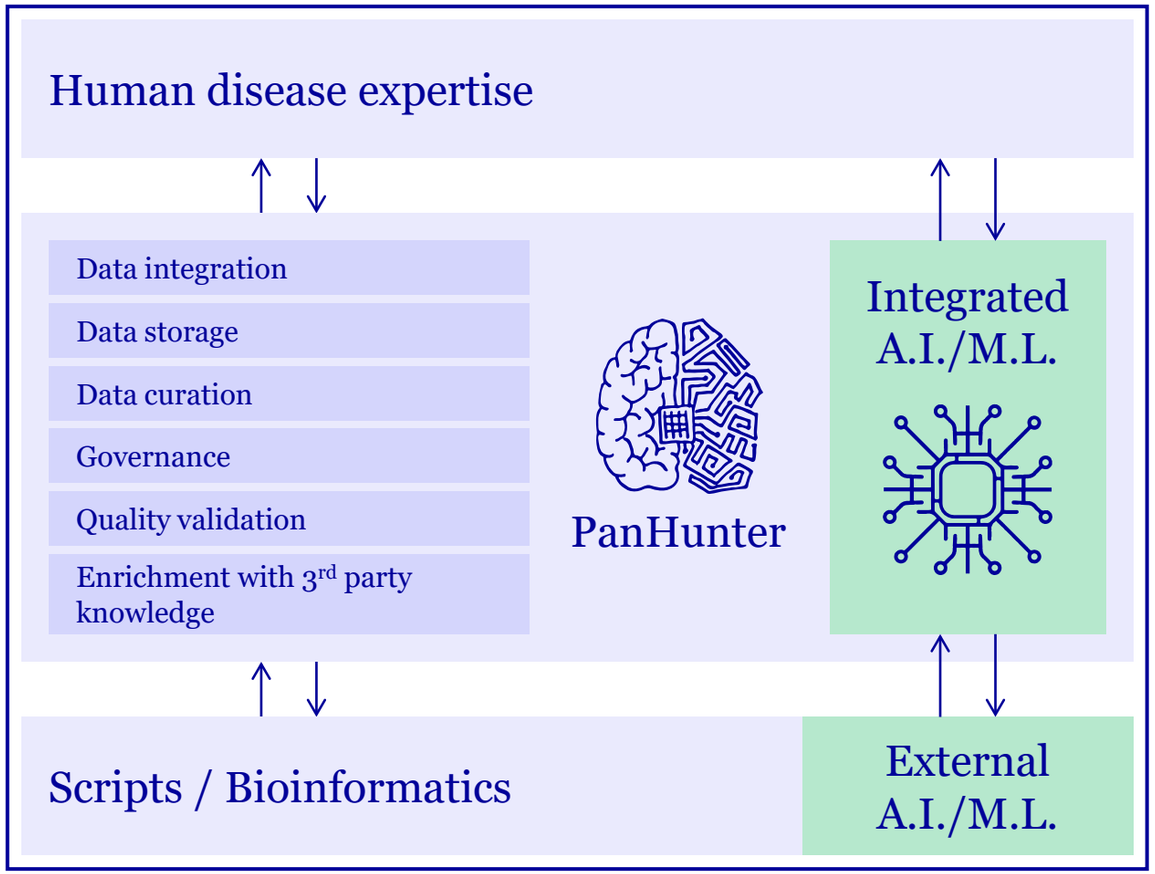
PanHunter is the platform to manage high dimensional data

PanHunter: Full-scale A.I. driven analysis platform

PanOmics continuum

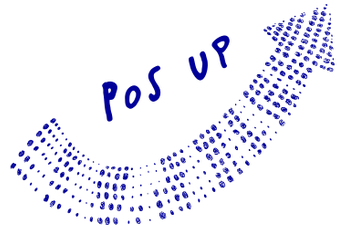
- **Genomics**
  - Whole genome
  - Whole exome
- **Transcriptomics**
  - ScreenSeq
  - Bulk
  - TempoSeq
  - SingleCell
  - Spatial Single Cell
- **Proteomics**
  - ScreenPep
  - Olink
  - Shallow
- **Metabolomics**
- **Clinical data**
  - Patient information
  - Medication
- **Compound information**
  - Structural features
  - Assay data
- **Meta data**
  - Experimental setup
  - Pharmacology

Value generation



Actionable output

- A.I. supported Target ID
- Drug Screening result visualization and interpretation
- Automated reporting
- Disease understanding
- Model validation
- Safety prediction



Agenda

9:00-9:30	Shaping (new) markets
9:30-11:00	PanOmics – From patients for patients
	• *Better disease understanding & diagnostics*
	• *Advanced disease modelling*
	• *A.I. use cases along the value chain*
11:00-11:15	*Coffee Break*
11:15-12:15	Impactful therapies
	• *Integrated platform*
	• *Diabetes*
	• *Oncology*
12:15-13:30	*Lunch Break*
13:30-16:00	Round Tables

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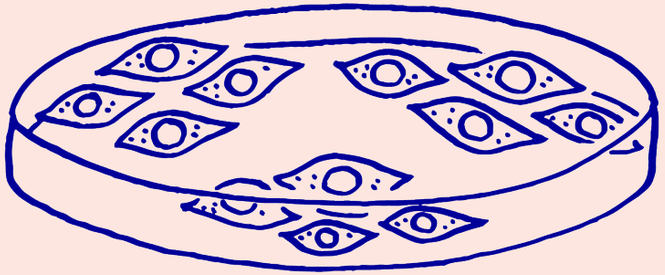
Introduction to cell therapy

Background



Cell therapy

is a treatment in which *viable cells (autologous, allogeneic, iPSC-derived)*, are injected, grafted or implanted *into a patient* in order to improve or cure a disease.

Induced pluripotent stem cells

(iPSCs) are a type of stem cell that can be generated directly from a somatic cell. *iPSC technology* was pioneered by Shinya Yamanaka‘s lab. He was awarded the 2012 Nobel prize for the discovery that mature cells can be reprogrammed to become pluripotent.

Providing functional cures with cell therapies

Translating the power of cells into medicines that matter

Immune cell treatments for cancer patients

1. Solid tumours

Prior treatment | After 2 weeks

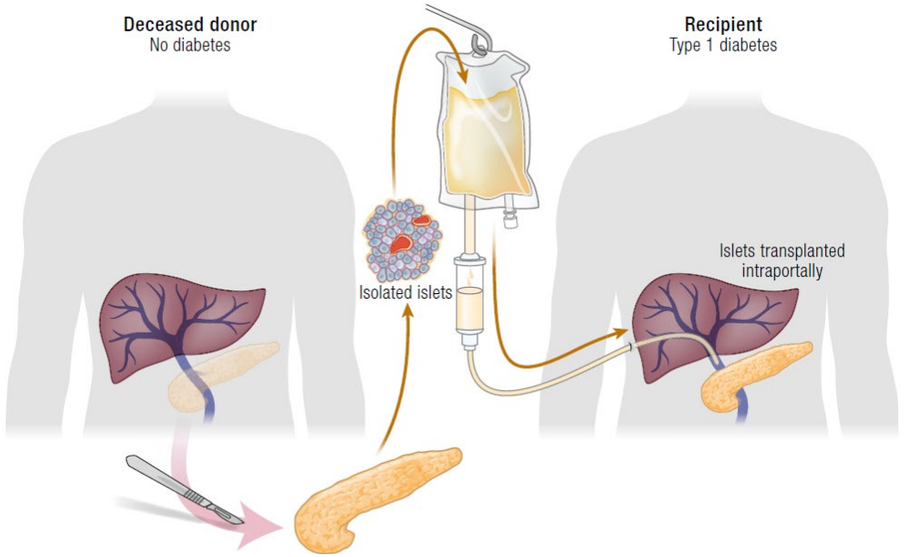
After a single treatment of autologous **TIL**[1] therapy, 25% of heavily pre-treated, terminally ill melanoma patients are still alive >8 year[2,3,4]

2. Blood cancers

2012 | 2022

Emily Whitehead was 1st pediatric patient to receive **CAR T cell therapy** in 2012 to treat ALL[5]. She celebrated 10 years of being cancer-free in May 2022[6].

For diabetic patients: Beta cell replacement therapy



75% of type-1-diabetics are insulin-independent two years after cadaveric human islet transplantation

1 TIL: tumor infiltrating lymphocytes
2 Dudley et al., Clin Can Res 2010
3 National Cancer Institute (NCI), St. Rosenberg, M. Dudley, March 2009, data added Jam 2018
4 Forget et al., Clin Can Res 2018
5 CAR: Chimeric Antigen Receptor T-cell therapy to treat Acute Lymphoblastic Leukemia
6 Photo used with kind permission from Emily Whitehead Foundation

Increasing market access for cell therapies

Pipeline of cell & gene therapies 2023

	Therapy	Type	Indication	Status
Approved	**Hemgenix** *(uniQure and CSL Behring)*	Gene Therapy	Hemophilia B	Approved (February 2023)
	Omisirge *(Gamida Cell)*	Cell Therapy	Reduce time to neutrophil recovery and infection in patients with hematologic malignancies	Approved (April 2023)
	Vyjuvek *(Krystal Biotech)*	Gene Therapy	Dystrophic epidermolysis bullosa	Approved (May 2023)
	Elevidys *(Sarepta Therapeutics)*	Gene Therapy	Duchenne muscular dystrophy	Approved (June 2023)
	Lantidra *(CellTrans)*	Cell Therapy	Type 1 Diabetes	Approved (June 2023)
	Roctavian *(BioMarin Pharmaceuticals)*	Gene Therapy	Hemophilia A	Approved (June 2023)
BLA/MAA Accepted	**CTX001** *(Vertex Pharmaceuticals & CRISPR Therapeutics)*	Gene Editing Therapy	Sickle cell disease, β-thalassemia	EU decision expected in the fall of 2023 FDA decision set on sickle cell disease for December 8, 2023 FDA decision for β-thalassemia expected March 2024
	Lifileucel *(Iovance)*	Cell Therapy	Metastatic melanoma	FDA decision set for November 25, 2023
	NurOwn *(BrainStorm Therapeutics Inc.)*	Cell Therapy	Amyotrophic lateral sclerosis (ALS)	FDA decision set for December 8, 2023
	Lovo-cel *(Bluebird bio)*	Gene Therapy	Sickle cell disease	FDA decision set for December 20, 2023
BLA/MAA Submitted	**HPC Cord Blood** *(StemCyte)*	Cell Therapy	Unrelated Donor hematopoietic progenitor cell transplantation	BLA Pending

Anticipated 2024 decisions			
Afami-cell *(Adaptimmune)*	**CT-053** (CARsgen Therapeutics)	**Fidanacogene Elaparvovec** (Pfizer)	**Libmeldy** (Orchard Therapeutics)
Tab cel *(Atara Biotherapeutics)*	**Upstaza** (PTC Therapeutics)	**Vyjuvek** (Krystal Biotech)	**Elevidys** (Sarepta Therapeutics)

Sector Snapshot Alliance for Regenerative Medicine 2

- **Nr of cell and gene therapies with market approval is increasing**
  - 80% autologous with limited pat reach
  - (Hem)Oncology, inherited genetic diseases
- **Next generation moving to off-the-shelf & larger indications approaching market**
  - Cardiovascular, Metabolics & Neurology
- **iPSC-based therapies early in development but entering clinical space**
  - no significant safety issues
  - Next-gen with gene-editing ready to go

As of August 2023
AARM Alliance of Regenerative Medicine; Report 08/2023

Revolutionising access to cell therapies

Advantage of “off-the-shelf” versus autologous/donor-based approach

Autologous

Patient *Manufacturing* *Just-in-time* *1x dose*

Allogeneic donor-derived

Healthy donor *Manufacturing* *Off-the-shelf* *100x doses*

Allogeneic iPSC-derived

Master iPSC bank *Manufacturing* *Off-the-shelf* *10,000x doses*

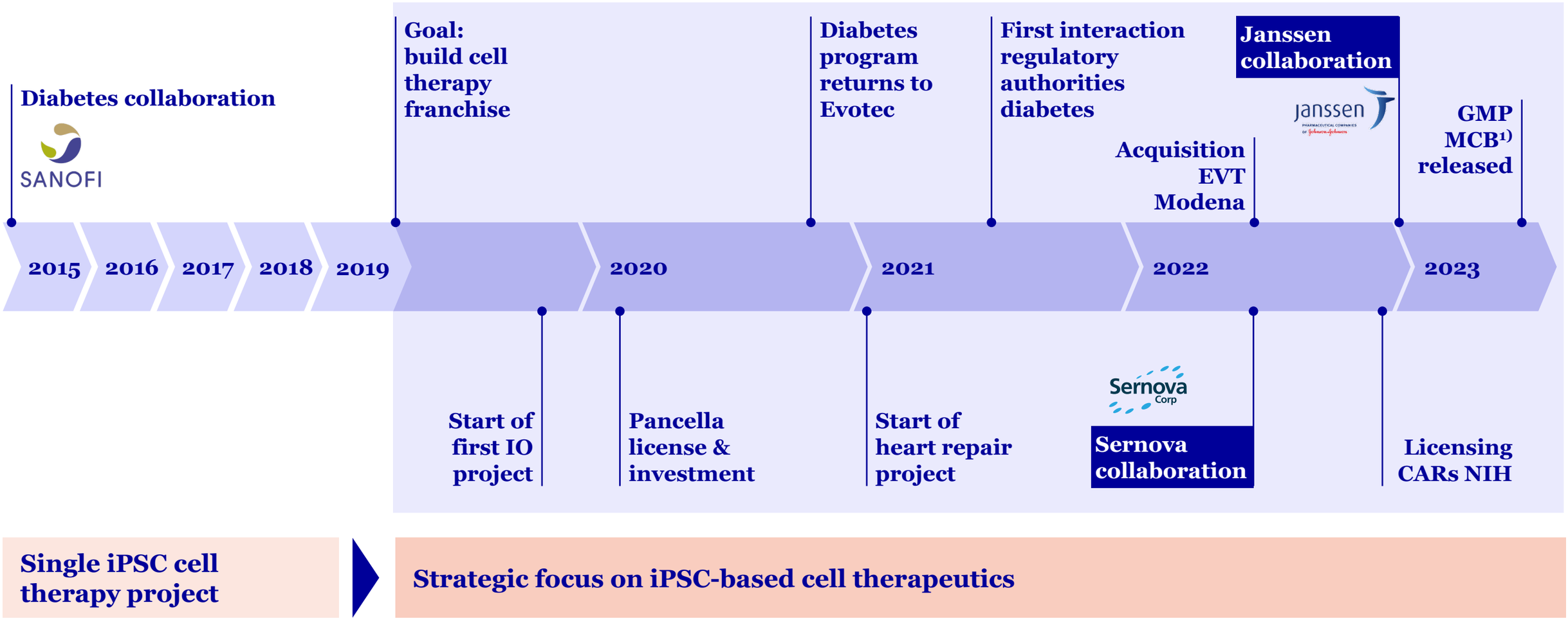
iPSC-based off-the-shelf therapeutics

- **Reduced complexity:** Patient is not part of manufacturing process
- **Unlimited** starting material
- **Clonal** & high-fidelity gene editing
- **Consistent quality** of final product
- **On demand** product available to patients
- **Versatile:** Single platform suitable to manufacture multiple cell types & diseases

iPSC = inducible pluripotent stem cell

Significant platform and project portfolio built over 4-year period

Strategic internal efforts from 2019 up to now



Single iPSC cell therapy project

Strategic focus on iPSC-based cell therapeutics

1) Master cell bank

A portfolio of off the shelf iPSC-based cell therapy programs

Evotec's internal and partnership project portfolio

	Field	Program/ Project	Disease area	Protocol	Pre-clinical research	Pre-clinical development	IND / Phase I
Partnered	**Cancer immuno-therapy**	γδ iT	Oncology	*Undisclosed*			
	Metabolic disease (Sernova Corp)	E.iBeta (Device)	Diabetes				
Partnering oppor-tunities	**Cancer immuno-therapy**	iNK	Oncology				
		iMAC	Oncology				
		αβ iT	Oncology				
	I&I[1]	iNK, αβ iT	Fibrosis, SLE[2)]				
	Metabolic disease	E.iBeta (Engineered)	Diabetes				
	Other	iCM	Heart failure				
		iRPE, iPR	Ophthal-mology				
		…					

iPSC-derived cell types

iNK	Natural killer cells
iT	αβ and γδ T cells
iMAC	Macrophages
iBeta	Pancreatic islets
iCM	Cardiomyocytes
iRPE	Retinal pigment epithelium cells
iPR	Photoreceptors

▸ Each cell type can deliver multiple differentiated products

1 Inflammation and Immunology disease area
2 Systemic Lupus Erythematosus

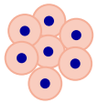
Integrated platform for iPSC-based therapeutics

Truly “off-the-shelf”, fully scalable cell therapy products

A process to overcome a major hurdle in cell therapy

Developing industrialized GMP manu-facturing pro-cesses that are fully scalable to serve the market with up to tens of thousands of doses

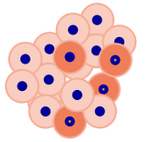
- Fully characterized



GMP Master iPSC line

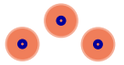
Precise Gene editing

- Morphology/ Viability
- Confirmation of genetic modification

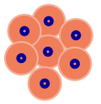


Gene edited iPSC pool

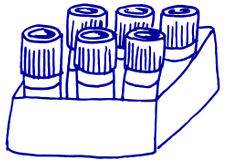
Single cell clonal selection



- Full genetic QC
- Differentiation capacity
- Functional characterization of differentiated cells



Engineered clonal iPSC pre-banks

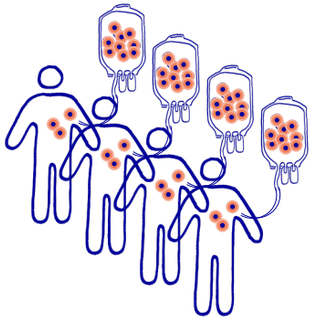


Engineered Master iPSC bank

Large scale GMP Manufacturing

Off-the shelf cell therapy product

- Extensive QC
- Cryo-storage
- Clinical batch release



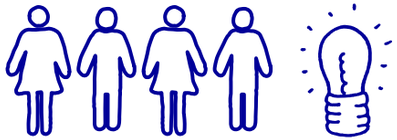
Patients

Integrated platform for iPSC-based therapeutics is becoming reality

From iPSCs to patients

Exploratory

- iPSC differentiation
- Gene editing
- *In vitro* PoC[1]
- GMP-feasibility



Dedicated team of >120 scientists with industry-leading expertise.

Pre-clinical research

- GMP-compatibility
- Upscaling
- *In vivo* PoC
- Regulatory

Human starting material.

Validated GMP iPSC line and GMP MCB[2]).

Pre-clinical development

- CMC
- Pre-clinical safety
- Regulatory/IND

GMP-compatible gene editing technology for flexible selection of genetic modifications based on indication/ strategy.

Clinical

- Clinical supply
- Patient stratification
- Regulatory

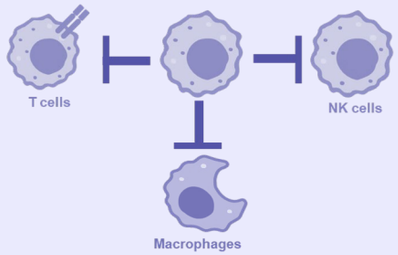
GMP-compatible bio-reactor format for up-scaling and production of clinical material.

1 Proof-of-concept
2 Master cell bank

Multiplex gene editing to create highly efficacious and safe therapies

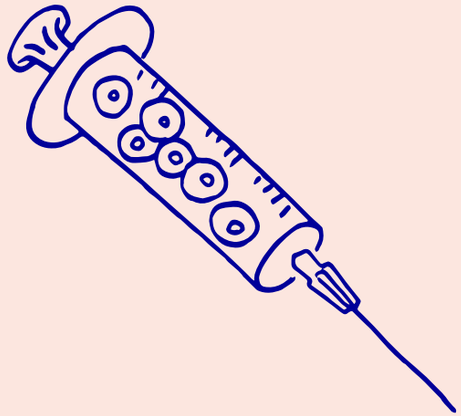
The power of gene edited iPSC cell therapies

Immune-tolerance to prevent allo-rejection

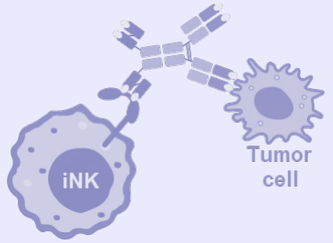


Safety switches/ tags

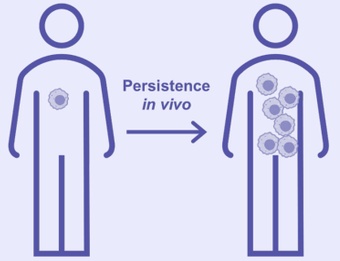
Gene-edited, iPSC-derived cell therapies



Tumor targeting via CARs and TCRs



Increase cell persistence and overcome hostile tumour environment



Gene editing technologies to develop cell therapies that are custom made for a given disease indication and patient population increasing the likelihood of success

Centre of excellence for cell therapeutics manufacturing

Evotec Modena


evotec

#RESEARCHNEVERSTOPS

NEWS RELEASE, 30 MAY 2022

EVOTEC ADDS CELL THERAPY MANUFACTURING FACILITY WITH ACQUISITION OF RIGENERAND

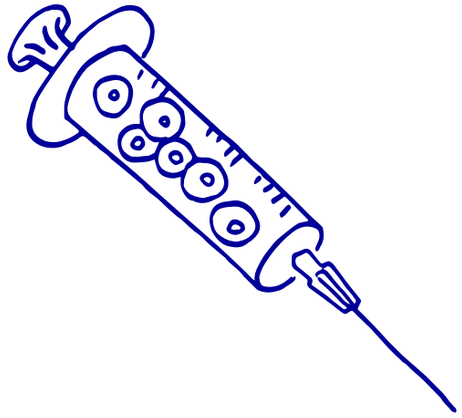
- EVOTEC'S **EVO**CELLS PLATFORM INTEGRATES INNOVATIVE OFF-THE-SHELF IPSC CELL THERAPY DISCOVERY WITH DEVELOPMENT AND MANUFACTURING

- Founded in 2009 as spin-off of the University of Modena and Reggio Emilia
- Scientific founder Prof. Massimo Dominici is one of the pioneers in clinical cell therapy
- State-of-the art GMP manufacturing facility (5 clean rooms, 1,200 m²) with room for significant expansion, ~ 25 FTEs
- cGMP facility accredited by Italian Authority for the manufacturing of clinical stage cell therapies
- Experienced to manufacture complex cell therapies including pre-GMP optimization steps
- Experience with CAR-T, MSCs, dendritic cells and exosomes
- Tech transfer for manufacturing of iPSC-based therapeutics on-going

A powerhouse for iPSC cell therapy research & development

Selected KPIs

Translation from science into clinical application



>120

Scientists dedicated to cell therapy

>15

iPSC-derived cell types

>200

Cell production runs per year for Development material

>10

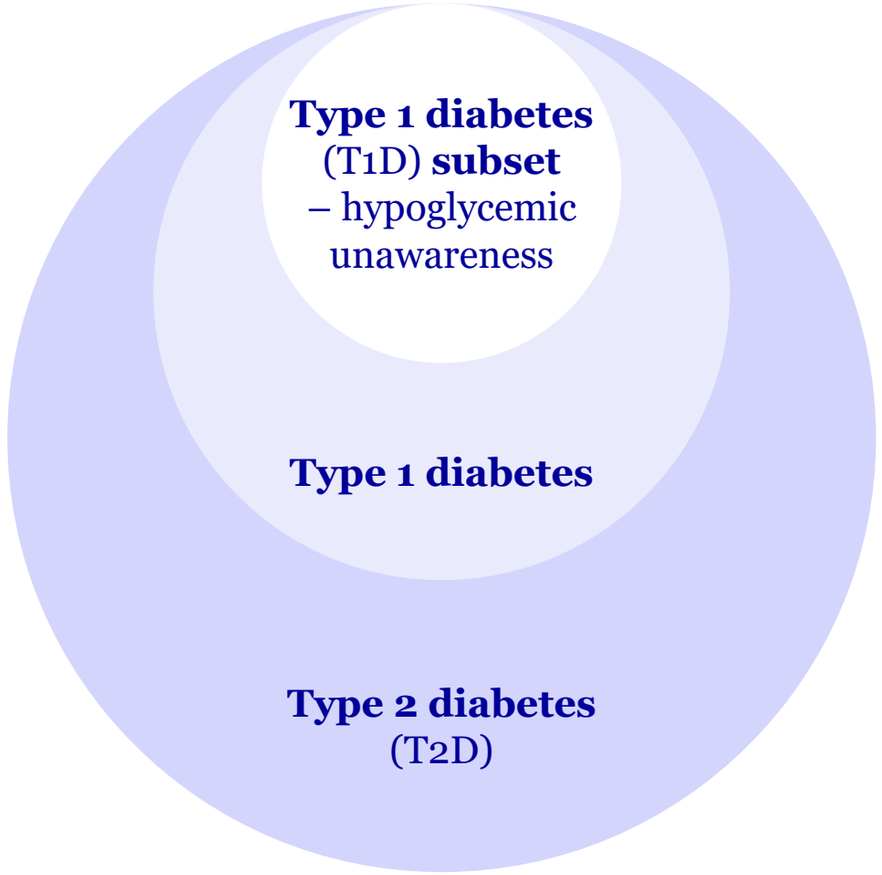
Cell therapy projects

Pipeline building with iPSC-based cell therapy in Diabetes

Diabetes program with broad therapeutic scope

Targeting high-risk patients first to expand to large patient populations

Size[1] of potential patient population



Type 1 diabetes

- Standard of Care: intensified insulin treatment
- Gold standard islet transplantation
  - Limited availability and mostly restricted to **high-risk pts** with hypoglycemic episodes
  - Immunosuppression required

Type 2 diabetes

- Standard of Care: change of life-style: weight loss, physical activity
- Oral drugs: metformin, GLP1-agonists, DPP4-inh., SGLTZ-2 inh.
- Insulin

Our goal is to provide a curative approach by **islet replacement therapy** with positive impact on long-term complications and quality of life

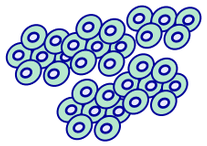
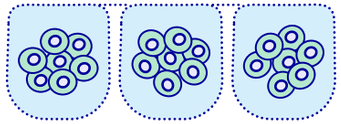
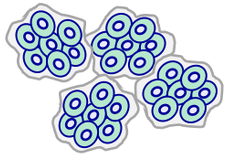
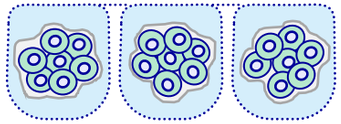
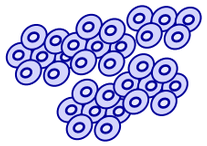
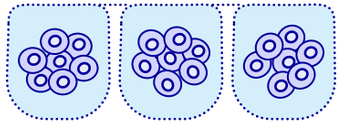
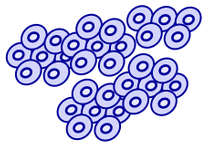
Next steps

- **Gene edited beta cells** with cloaking technology to avoid immune rejection and need for immunosuppression
- This would widen the scope of the therapy for use in a much **broader T1D population**
- This approach would also offer the opportunity to potentially expand into **T2D** as well, which is a significantly larger market

1 schematic presentation

Multiple product generations will enable true leadership

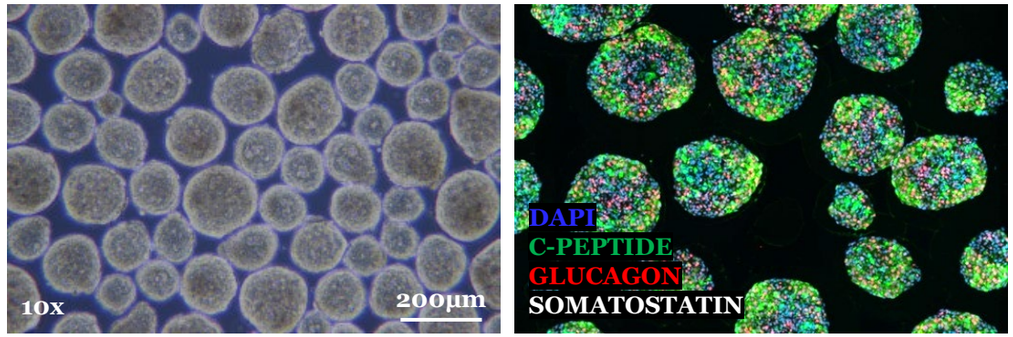
Opportunity for multi-project partnership with Pharma

Sernova Corp	Non-modified iPSC beta cells + cell pouch *Immuno-suppressed patients*		**Implantation in CellPouch™** 
Sernova Corp	Non-modified iPSC beta cells + cell coating + cell pouch *No immunosuppression*		**Implantation in CellPouch™** 
unpartnered	Genetically modified iPSC beta cells + device *no immunosuppression*		**Implantation in open device** 
unpartnered	Genetically modified iPSC beta cells *Device-less, no immunosuppression*		**Device-less - portal vein infusion**

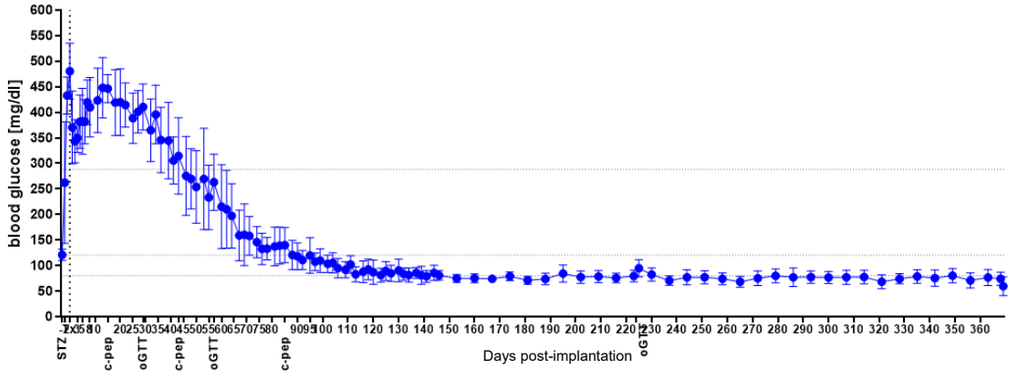
iPSC-derived islets for the treatment of Type 1 diabetes

Evotec achievements and current focus

iPSC-derived islet like clusters



Random-fed blood glucose in diabetic mice implanted with 1.5M GMP iPSC-derived beta cells (kidney capsule)



- Scalable, GMP-compatible and IP-protected manufacturing procedure for iPSC-derived islet like clusters, with optimized beta cell fraction
- Manufacturing involves a cryopreservation step, and is currently implemented at Evotec's GMP manufacturing site
- QC strategy for product release in place
- Manufacturing and QC strategy endorsed by PEI[1] (German regulatory authorities)
- Long-term *in vivo* efficacy in translatable animal model
- Manufacturing of tox batch for pre-clinical GLP safety study as next step

1 Paul Ehrlich Institute

On the path to a first clinical candidate

Utilises Sernova's clinically validated Cell Pouch device

Cell Pouch System

- Implantable medical device
- Provides vascularized environment for cells
- Long term survival
- Scalable, retrievable
- Positive Phase I/II clinical data with primary human islets on safety & efficacy
- Pts reach insulin-independence

+

EVT3101

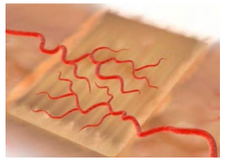
- **iPSC-based islet-like clusters mimicking human islet cells**
- Long-term funct
  rodent models o ;
  demonstrated
- Scalable 3D manufacturing procedure & manufacturing infrastructure
- Drug development ex-pertise and cGMP manu-facturing infrastructure

evotec

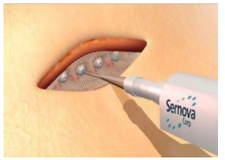
#RESEARCHNEVERSTOPS

NEWS RELEASE, 17 MAY 2022

EVOTEC AND SERNOVA ANNOUNCE EXCLUSIVE STRATEGIC PARTNERSHIP FOR IPSC-BASED BETA CELL REPLACEMENT THERAPY TO ADVANCE A "FUNCTIONAL CURE" FOR DIABETES



Proprietary Cell Pouch is placed deep under the skin, allowing for vascularization & creating a natural environment for long-term function of therapeutic cells



Therapeutics cells are transplanted directly into the vascularized tissue chambers of the proprietary Cell Pouch and start to produce insulin after maturation

Patient´s voice:

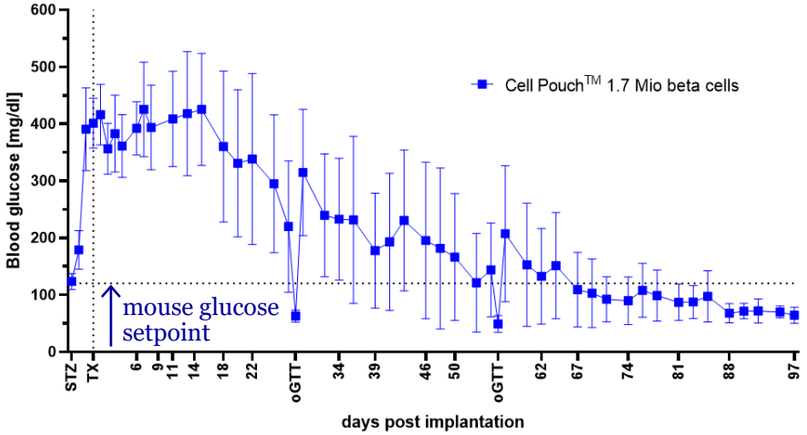
..."*After having T1D for 47 years with approximately 21,535 injections of various cow/pig, synthetic insulins, 34,310 finger sticks, 1,460 urine tests, 15 years on the pump, carbohydrate counting, blood tests, low blood sugar reactions, and doctors…doctors and more doctors' visits, I have now been free of the need for injectable insulin for 15 months."*...

Sernova 2023, Cell Pouch with cadaveric human islets

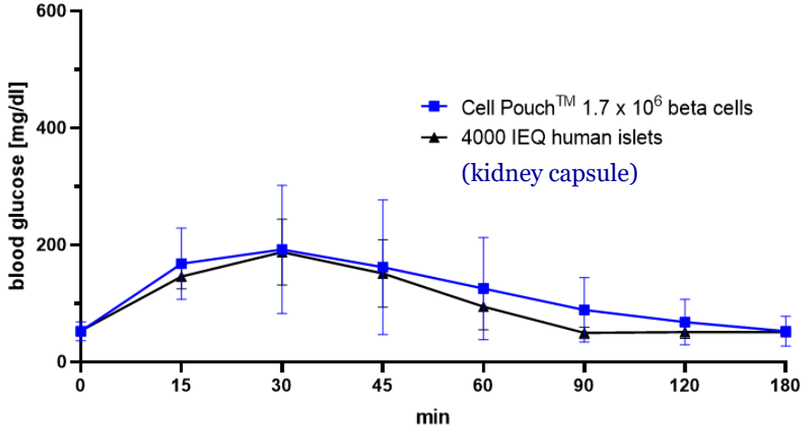
Excellent anti-diabetic activity of Evotec ILCs[1] in the Cell Pouch™

Human islet-like potency; full tissue integration and blood supply for beta cells in mouse diabetes model

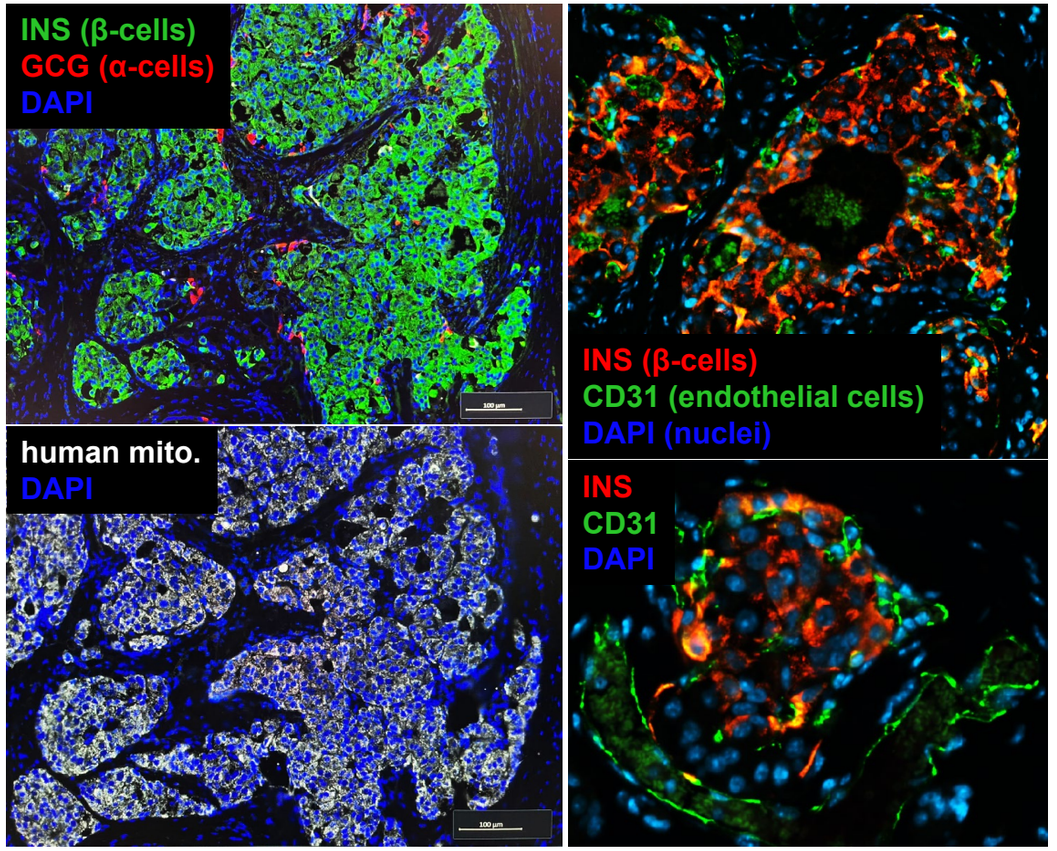
Efficient normalization of random fed glucose



Efficient glucose clearance and no hypoglycemias in oGTT[2] (8 week timepoint)



Excellent survival and tissue integration of islet cells, and optimal supply with blood vessels in the Cell Pouch



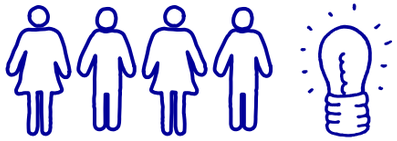
1
2 Oral Glucose Tolerance Test

Translation into clinical development

From iPSCs to patients

Exploratory

- iPSC differentiation
- Gene editing
- *In vitro* PoC[1]
- GMP-feasibility



Dedicated team of >120 scientists with industry-leading expertise.

Pre-clinical research

- GMP-compatibility
- Upscaling
- *In vivo* PoC
- Regulatory

Human starting material.

Validated GMP iPSC line and GMP MCB[2]).

Pre-clinical development

- CMC
- Pre-clinical safety
- Regulatory/IND

GMP-compatible gene editing technology for flexible selection of genetic modifications based on indication/ strategy.

Clinical

- Clinical supply
- Patient stratification
- Regulatory

GMP-compatible bio-reactor format for up-scaling and production of clinical material.

1 Proof-of-concept
2 Master cell bank

Gene-editing is the next step to increase efficacy & safety

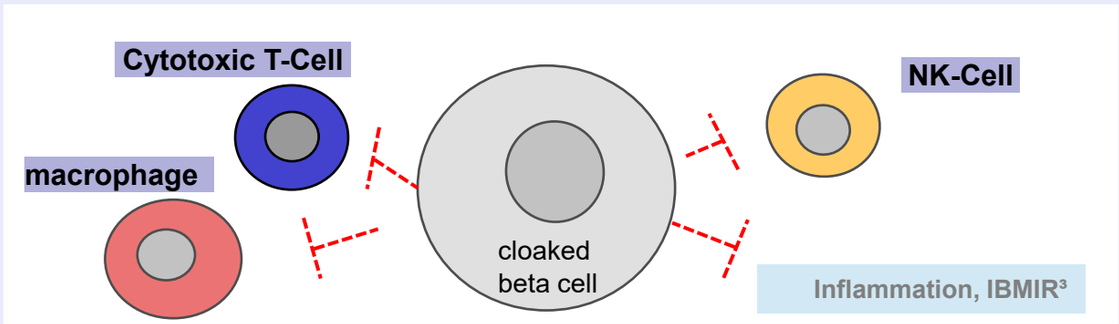
Introducing cloaking (immune-shielding) and FailSafe (drug-inducible kill-switch)

Nobel-prize awarded technology (2020 J.Doudna, E.Charpentier)

Combining two gene editing concepts to render its allogeneic “off-the-shelf” cell therapy products most durable and safe:

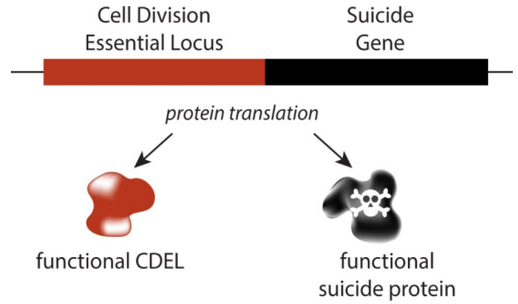
Cloaking enables long-term persistence without immunosuppression

- Evading immune destruction of allogeneic “off-the-shelf” cell therapy
- Avoiding immunosuppressive drugs with significant long-term risks [1]
- Gene editing in iPSCs to block known pathways of allograft rejection (“cloaking”) is a promising alternative
- Evotec is currently evaluating two cloaking strategies: the in-house developed “EvoCloaking” and the in-licensed “iACT”[2]



FailSafe is a safeguard against tumorigenicity for selective elimination of undesired proliferating cells

- Device-less and immune-evasive implantation of cell therapeutics with additional safety switch to selectively eliminate dividing graft cells Evotec has a license for the use of panCELLa‘s drug-inducible “FailSafe®” technology[4]
- Proliferating cells get sensitive to a death-inducing drug while non-dividing graft cells are left unaffected
- Physical and transcriptional link between cell division and suicide genes strongly reduces chances of kill-switch elimination or silencing



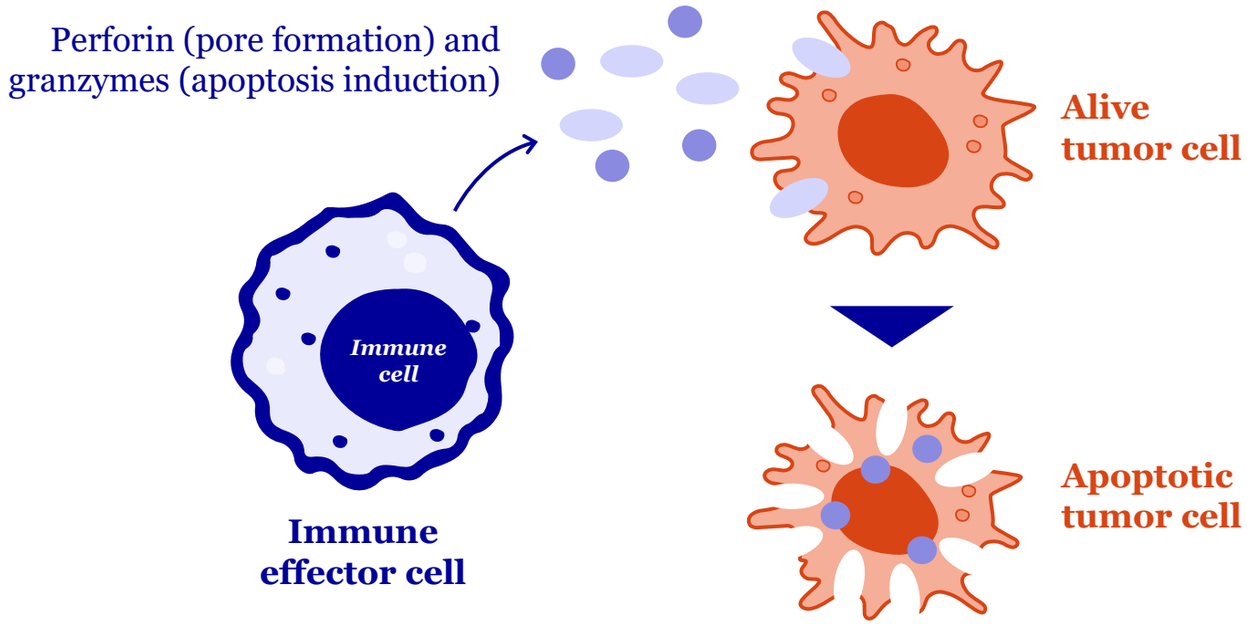
1) Ruiz and Kirk 2015; doi: 10.1016/B978-1-4557-0268-8.00097-X
2) Harding, J., Vintersten-Nagy, K. et al. (2019). Induction of long-term allogeneic cell acceptance and formation of immune privileged tissue in immunocompetent hosts. bioRxiv. https://doi.org/10. 1101/716571
3) Instant Blood Mediated Inflammatory Reaction
4) Liang Q, Monetti C, Shutova MV, Neely EJ, Hacibekiroglu S, Yang H, Kim C, Zhang P, Li C, Nagy K, Mileikovsky M, Gyongy I, Sung HK, Nagy A. Linking a cell-division gene and a suicide gene to define and improve cell therapy safety. Nature. 2018 Nov;563(7733):701-704

Pipeline building with iPSC based cells in Oncology and I&I

Immune cells can be serial killers – which is good

Why cell therapies are highly efficacious in the clinic – if they work

Mode of action



- Immune cells can “recharge” their toxic payload to kill multiple tumor cells
- They can proliferate in the patients multiplying the administered dose
- They can persist for years including “memory function” against the tumor
- They can be genetically manipulated for increased efficacy and safety

Cell therapy status quo

Currently marketed products

Breyanzi (lisocabtagene maraleucel) SUSPENSION FOR IV INFUSION

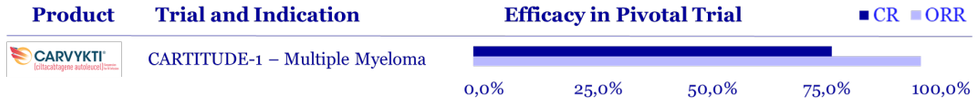
TECARTUS (brexucabtagene autoleucel) Suspension for IV infusion

YESCARTA (axicabtagene ciloleucel) Suspension for IV infusion

Abecma (idecabtagene vicleucel) SUSPENSION FOR IV INFUSION

CARVYKTI (ciltacabtagene autoleucel) Suspension for IV infusion

KYMRIAH (tisagenlecleucel) Suspension for IV infusion



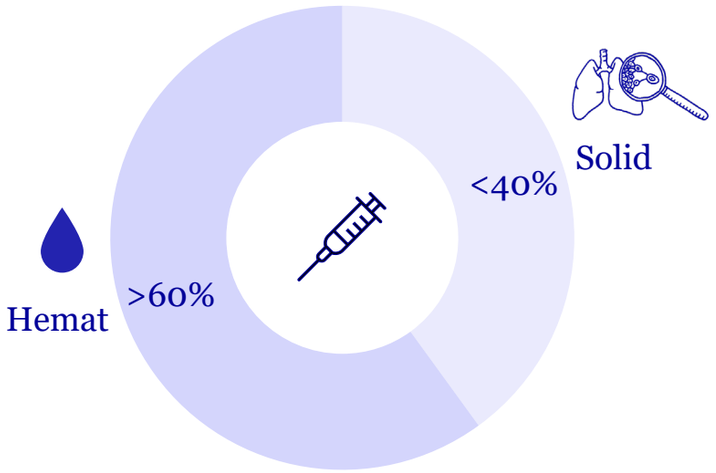
Autologous CAR T cell therapies available on the market primarily focus on the treatment of hematological cancers[1]

1 ... Informa Pharmaprojects analysis

Unlocking the full potential of cell therapies in oncology

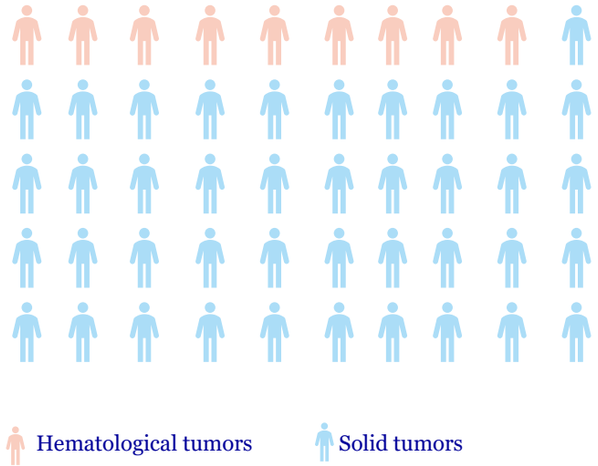
High unmet medical need in solid tumour indications

Cell therapy late-stage pipeline



>60% of current late-stage pipeline focused on hematological cancers[1]

Cancer incidence



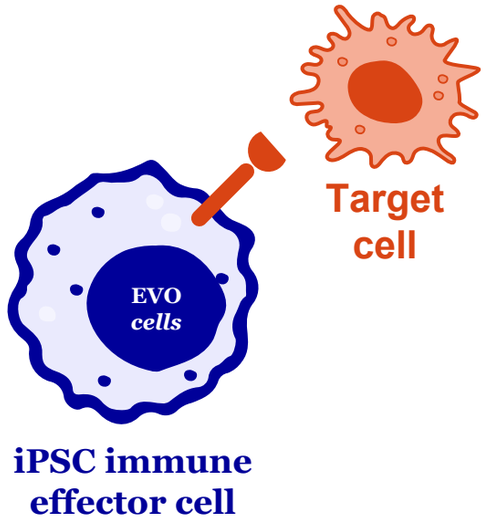
~90% of new case of cancer are attributable to solid tumors[2]

Current cell therapies are highly efficacious mainly in liquid tumor indications; we believe that innovative and differentiated approaches are needed to translate this into solid tumors, too

1 ... Informa Pharmaprojects analysis; 2 ... NCI statistics;

EVO*cells* oncology and I&I: an iPSC-based immune effector cell platform

Summary of platform components



Fully leveraging all elements of the iPSC-based cell therapy platform combined with in-depth disease area and asset development expertise

A broad range of iPSC-derived cell types to overcome the main hurdles of currently available cell therapies for cancer treatment

Flexible selection of targeting moieties depending on strategy and disease indication/patient population

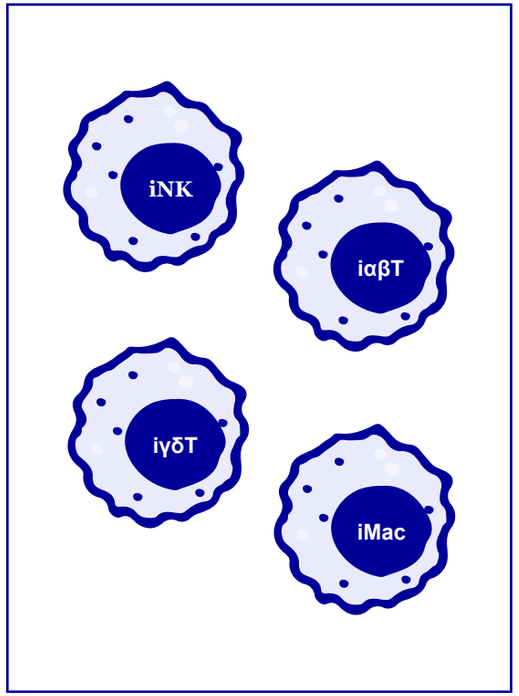
Genetic modifications of immune effector cells to tackle the shortcomings if current approaches and further boost the clinical efficacy

Early oncology product candidate pipeline in place including “lighthouse” projects; branching out into innovative treatments for auto-immune diseases

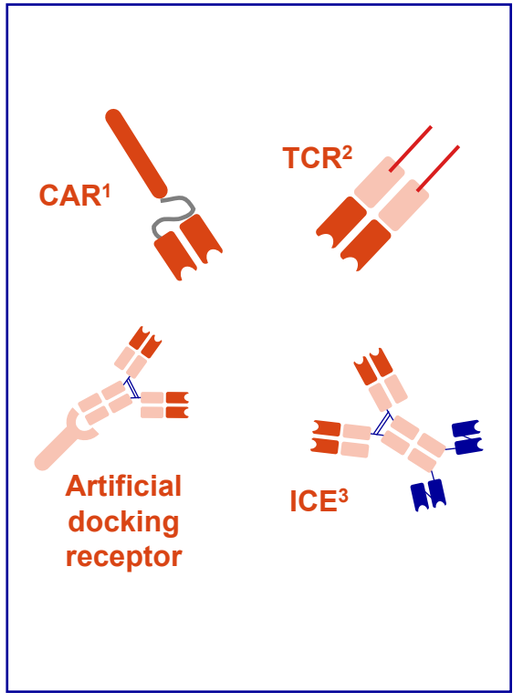
A toolbox to generate a universe of cell therapy product candidates

Evotec's technologies for iPSC-derived immune cell therapy

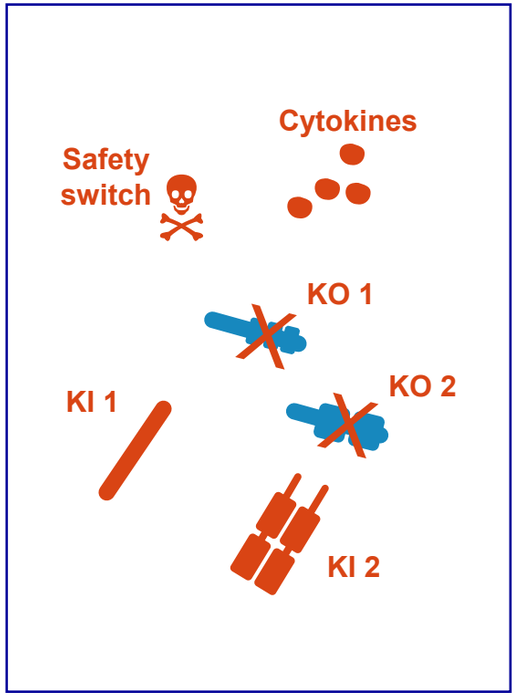
Immune cell type



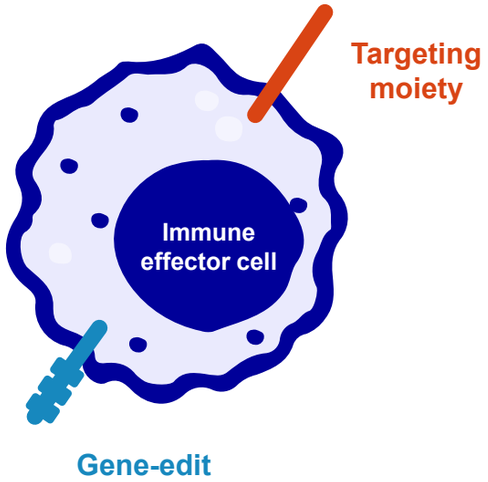
Tumor targeting



Gene-edits



Cell products



Combining iPSC-derived immune effector cells with different targeting modalities and gene-edits allows to generate an innovative and differentiated product candidate portfolio

1 Chimeric antigen receptor
2 T-cell receptor
3 Immune Cell Engager

The broadest iPSC-based immune effector cell portfolio in industry

Evotec's off-the shelf cell therapy programs

	Field	Program/ Project	Disease area	Protocol	Pre-clinical research	Pre-clinical development	IND / Phase I
Partnered	**Cancer immuno-therapy**	γδ iT	Oncology	*Undisclosed*			
Partnering oppor-tunities	**Cancer immuno-therapy**	iNK	Oncology				
		iMAC	Oncology				
		αβ iT	Oncology				
	I&I[1]	iNK	Fibrosis				
		αβ iT	SLE[2]				
		iMAC	Fibrosis				

iPSC-derived cell types

iNK	Natural killer cells
αβ iT	αβ and γδ T cells
γδ iT	γδ T cells
iMAC	Macrophages

- Each cell type can deliver multiple differentiated products

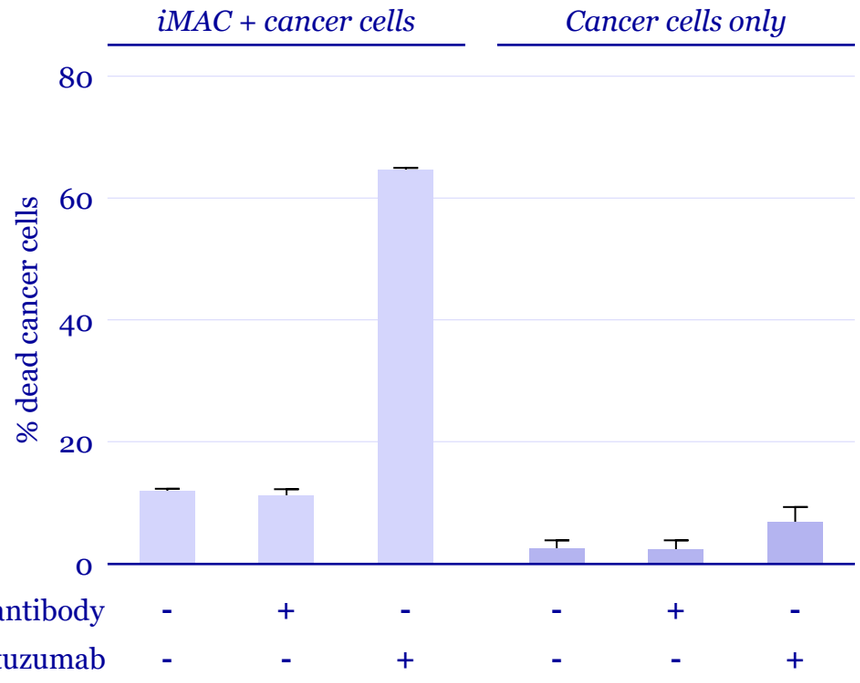
Leveraging technologies and know-how across multiple product candidates and disease areas reduces development costs and timelines

2 Inflammation and Immunology disease area
2 Systemic Lupus Erythematosus

A novel mode of action to eliminate patient-derived tumor cells

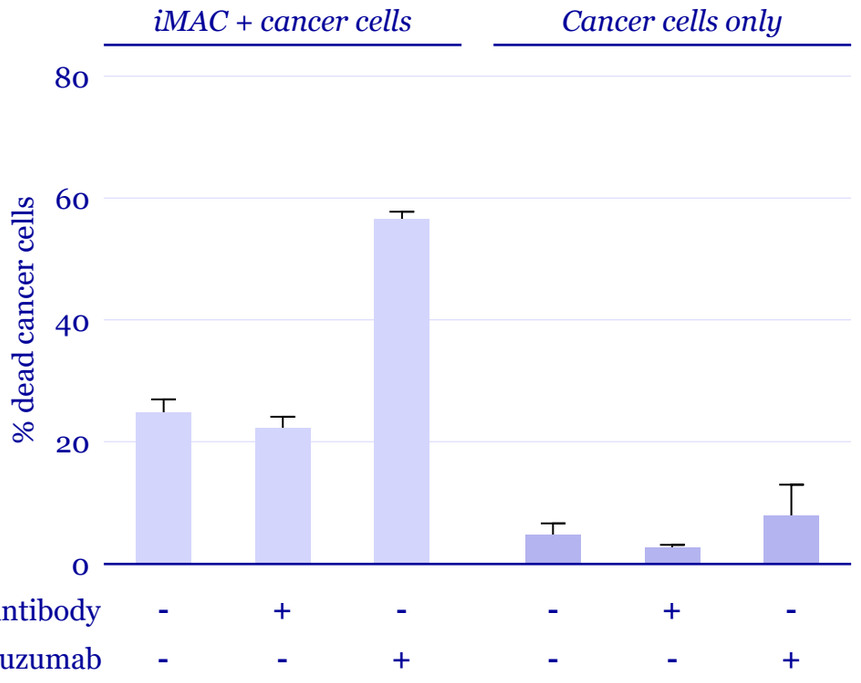
iPSC-based macrophages kill hard to treat primary cancer cells

Tumor cells of patient #1



Tumor cells of patient #2

E:T = 10:1

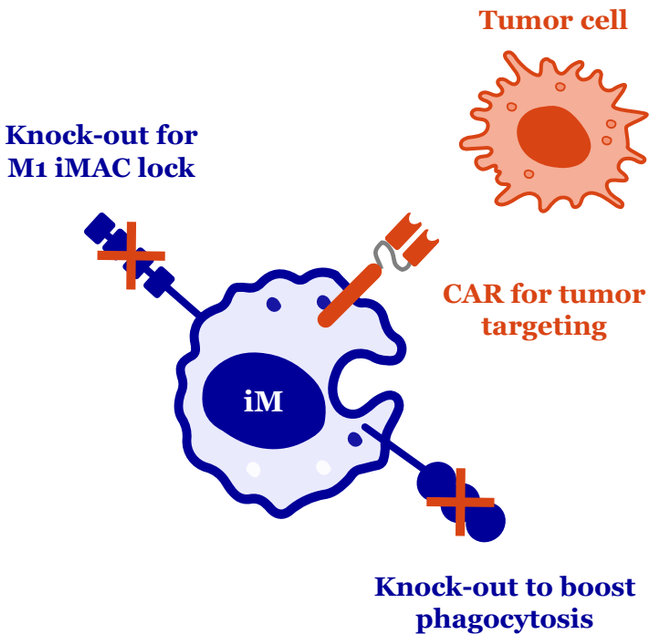


iPSC-derived macrophages can kill tumor cells directly and also phagocytose cancer cells to activate the endogenous immune system potentially leading to increased clinical efficacy

Developing an efficacious cell therapy dedicated to solid tumors

iPSC-based, gene-edited macrophages to overcome the limitations of current cell therapy approaches

Evotec's iMAC cell product candidates



Limitations of autologous T and NK cell therapies	Potential solutions provided by iPSC-based macrophages
Poor infiltration into solid tumors	Natural ability to infiltrate and traffic into solid tumors
Hostile TME[1], low immune cell infiltration	M1 iMACs are able to survive & reprogram the TME
Highly susceptible to suppressive signals	Genetic engineering to overcome the main suppressive signal
Tumor escape due to single target approaches	Phagocytose and presentation of multiple tumor antigens to immune cells
Limited patient material, massive costs and complex logistics	iPSC-based macrophages with the ability to increase dose/re-dose patients

Genetically optimized, iPSC-derived macrophages have the potential to overcome the obstacles of current cell therapies and can form the basis for a pipeline of highly efficacious solid cancer treatments

1 Tumor microenvironment

Agenda

9:00-9:30	Shaping (new) markets
9:30-11:00	PanOmics – From patients for patients
	• *Better disease understanding & diagnostics*
	• *Advanced disease modelling*
	• *A.I. use cases along the value chain*
11:00-11:15	*Coffee Break*
11:15-12:15	Impactful therapies
	• *Integrated platform*
	• *Diabetes*
	• *Oncology*
12:15-13:30	*Lunch Break*
13:30-16:00	Round Tables

Breakout Sessions

Two sessions of 60 minutes Q&A in two groups

13:30-14:30h / 14:45h-15:45h

TEAM *PanOmics*: Cord, Christiane, Olivier, Sandra, Bhushan

MEC I

TEAM *Impactful Therapies*: Werner, Andreas, Christine, Markus

MEC III

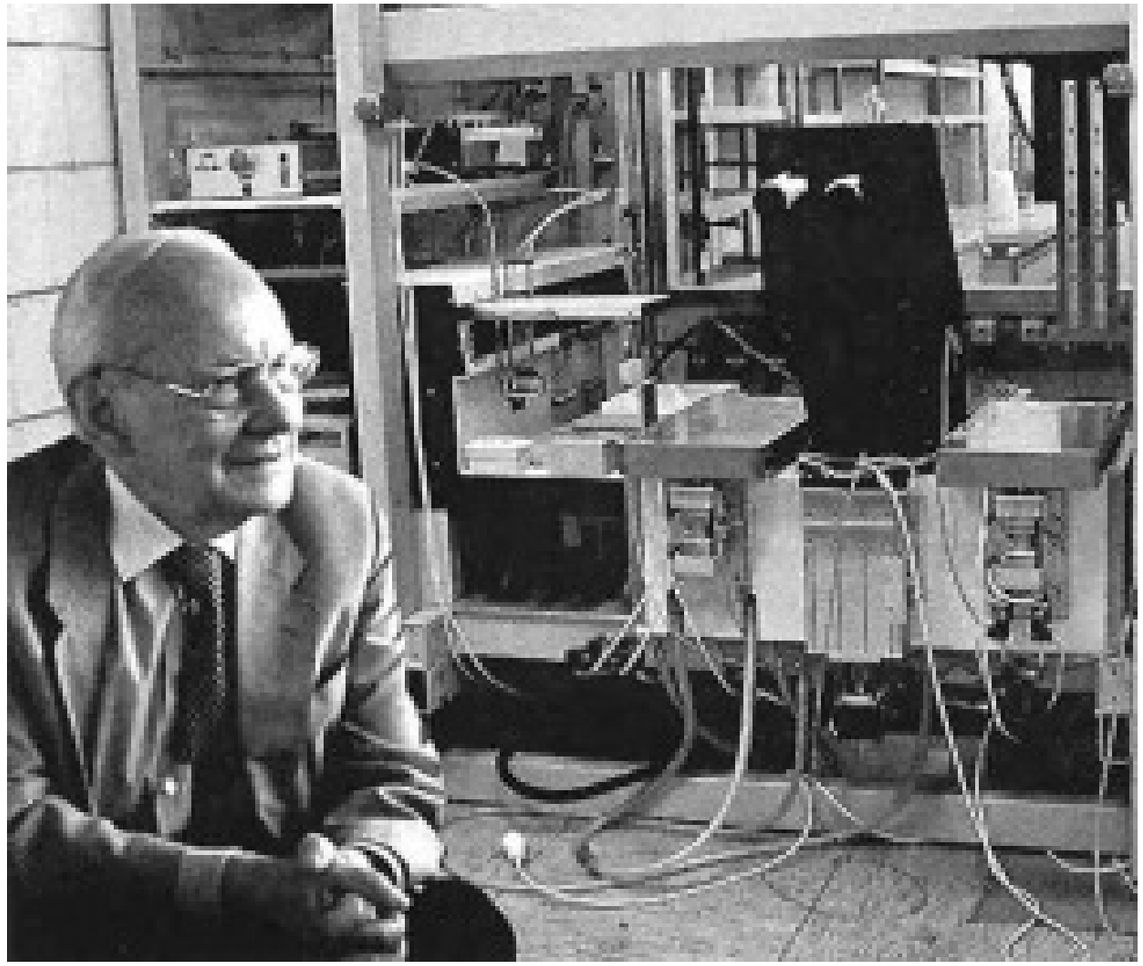
Closing Remarks

MEC I at ~16:00h

#researchneverstops

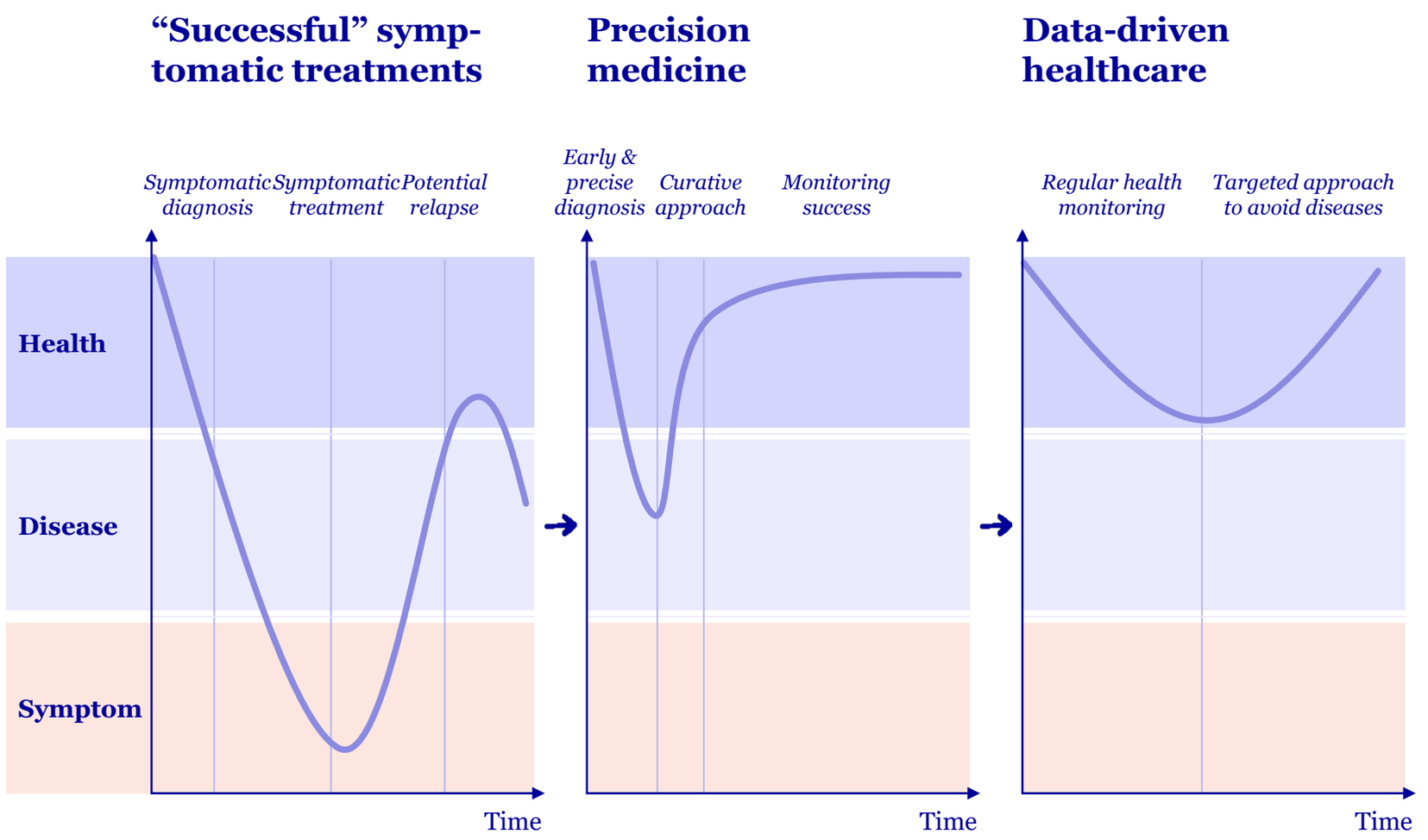
...and shapes new markets!

The initial idea is more modern today than ever before!



Shaping new markets means doing things differently

From symptomatic towards data-driven, preventive treatments



Our all-in efforts towards medicines that matter

- Industrialised PanOmics towards molecular disease understanding – enabled by PanOmics data generation "*without compromise*"
- "*From humans for humans*" discovery approach with iPSCs
- A.I.-powered PanOmics to enhance probability of success (POS) – in safety prediction and beyond
- A.I. and continuous manufacturing to break biologics access paradigm
- State-of-the art, A.I.-powered R&D value chain – proven at scale, by biotech and (big) pharma

Looking forward to seeing you in Toulouse …

Capital Markets Day 2024

evotec

#RESEARCHNEVERSTOPS

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+49 151 19405058 (m)