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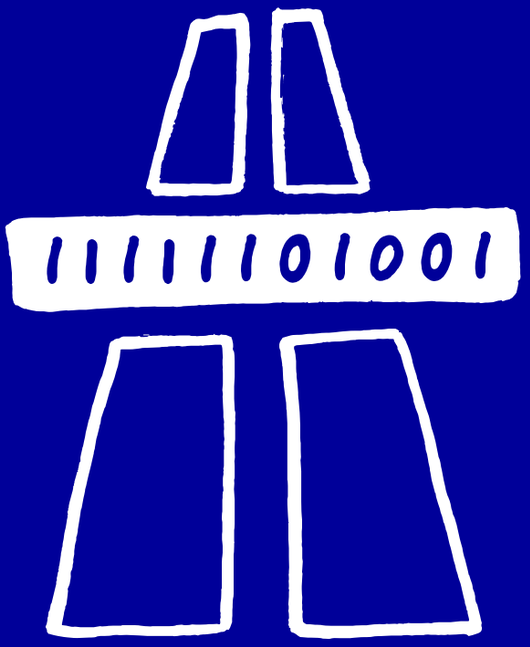
#RESEARCHNEVERSTOPS

# The *"Vroooooooooom"* behind Action Plan 2025

*The data-driven R&D Autobahn to Cures*



# Cautionary statement regarding forward-looking statements

Information set forth in this presentation contains forward-looking statements, which involve a number of risks and uncertainties. All statements other than statements of historical fact are forward-looking statements, which are often indicated by terms such as “anticipate”, “believe”, “could”, “estimate”, “expect”, “goal”, “intend”, “look forward to”, “may”, “plan”, “potential”, “predict”, “project”, “should”, “will”, “would” and similar expressions. The forward-looking statements contained herein represent the judgement of Evotec as of the date of this presentation. Such forward-looking statements are neither promises nor guarantees, but are subject to a variety of risks and uncertainties, many of which are beyond our control, and which could cause actual results to differ materially from those contemplated in these forward-looking statements. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any such statements to reflect any change in our expectations or any change in events, conditions or circumstances on which any such statement is based. Given these risks, uncertainties, and other factors, you should not place undue reliance on these forward-looking statements.

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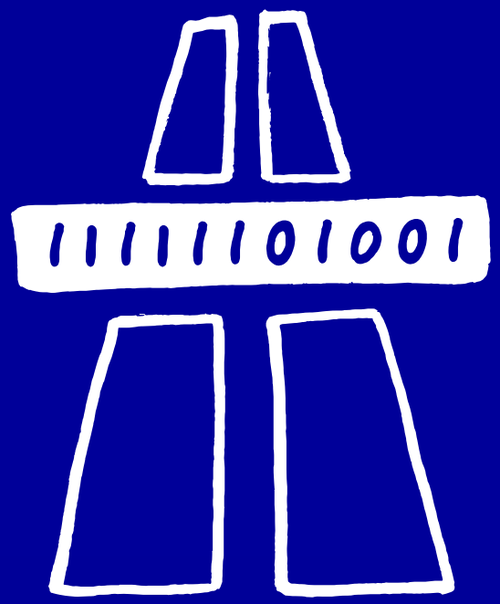
20 APRIL 2021

# DIGITAL CAPITAL MARKETS DAY: ACTION PLAN 2025

*Tuesday 20 April 2021*

*8.00 am EST – 10.30 am EST; 2.00 pm CET / 1.00 pm GMT*




## AGENDA

| | |
|---|---|
| ▶ 08.00 – 08.30 am | **Action Plan 2025 - The data-driven R&D Autobahn to Cures**<br>Our business strategy |
| ▶ 08.30 – 08.50 am | **Data-driven precision medicine**<br>iPSC – Witnessing a new paradigm |
| ▶ 08.50 – 09.05 am | Q&A session |
| ▶ 09.05 – 09.25 am | **From J.HAL℠ to J.POD®**<br>AI/ML-driven integrated process from discovery to commercial manufacturing of biologics |
| ▶ 09.25 – 09.45 am | **BRIDGEs**<br>From academic translation to patients |
| ▶ 09.45 – 10.00 am | **Financials – Guard rails of Action Plan 2025** |
| ▶ 10.00 – 10.30 am | Q&A session |

*The recorded webcast will be available as of the next day.*

# Let’s talk about Action Plan 2025

1st Capital markets day 2021

**Werner Lanthaler**
CEO

**Cord Dohrmann**
CSO

**Craig Johnstone**
COO

**Enno Spillner**
CFO

**Rainer Kuhn**
Neurosciences

**Sandra Lubitz**
iPSC

**Dean Pettit**
Biotherapeutic Science

**Thomas Hanke**
Academic Partnerships

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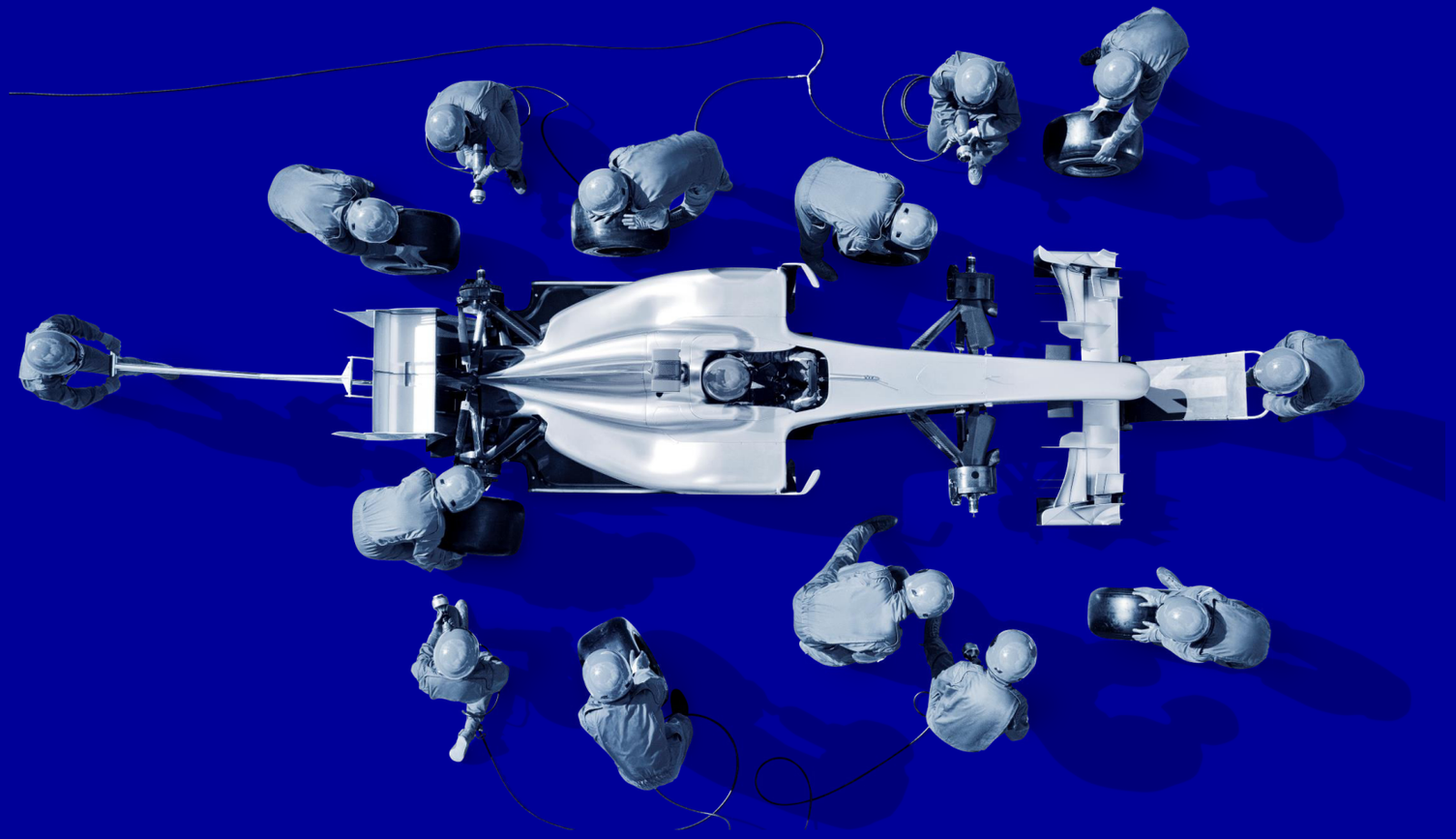


# Agenda

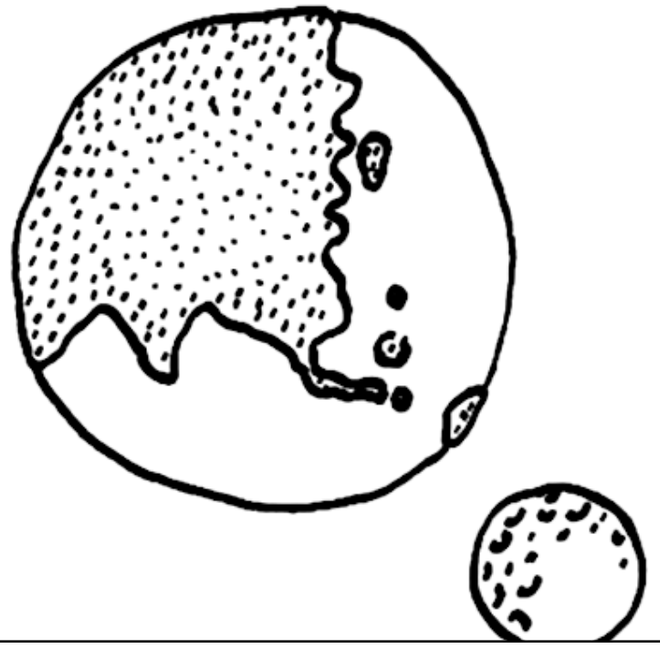
**Action Plan 2025 – The data-driven R&D Autobahn to Cures**
Our business strategy

**Data-driven precision medicine**
iPSC – Witnessing a new paradigm

**From J.HAL℠ to J.POD®**
AI/ML-driven integrated process from discovery to commercial manufacturing of biologics

**BRIDGEs**
From academic translation to patients

**Financials – Guard rails of Action Plan 2025**



*“The sharing Economy principles will bring down attrition massively.“*

**Werner Lanthaler**

# Action Plan 2025 – The data-driven R&D Autobahn to Cures

Our strategic frameworks

2009 2012 2018 2021 2025

**Action Plan 2012**
*Restructure for growth*

ACTION PLAN 2012
Focus and Grow

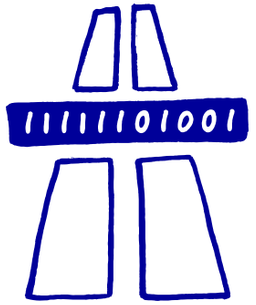
**Action Plan 2016**
*Build Innovation seeds*


ACTION PLAN 2016
Innovation Efficiency

**Action Plan 2022**
*Aspire global leadership*


ACTION PLAN 2022
Leading External Innovation

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




ACTION PLAN 2025
*The data-driven R&D Autobahn to Cures*

# Action Plans deliver significant value

## Action Plans in numbers

2009 | 2012 | 2018 | 2021 | 2025

### Action Plan 2012
*Restructure for growth*

**2010**
- Revenues: € 55 m
- Adj. EBITDA: € 2 m
- R&D investments:[1] € 2 m
- Co-owned projects: 6
- Employees: 519

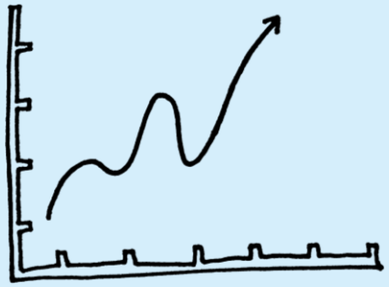
### Action Plan 2016
*Build innovation seeds*

**2015**
- Revenues: € 128 m
- Adj. EBITDA: € 9 m
- R&D investments:[1] € 18 m
- Co-owned projects: 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: 118
- Employees: 3,572

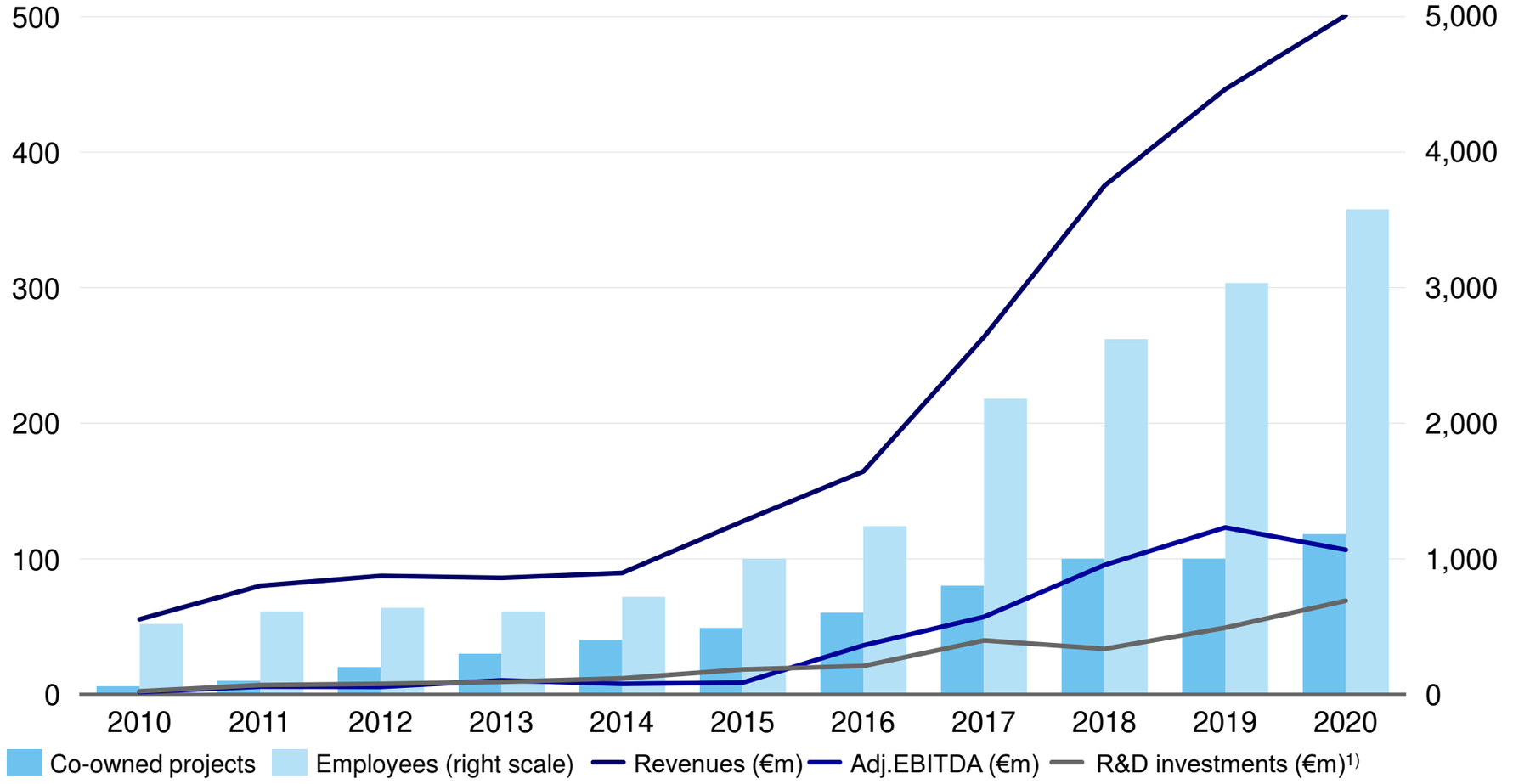
### Action Plan 2025
*Leadership in data, science, multimodality & access*



[1] Including equity investments

# Ten years of growth are "… just the beginning"

## Action Plans – Key Performance Indicators (KPI)




**10yr CAGRs2) of KPIs**

- Revenues: +25%
- Adj. EBITDA: +50%
- R&D investments1): +40%
- Co-owned projects: +35%
- Employees: +20%



1) Including equity investments
2) Compound annual growth rates

# Central infrastructures for better treatments

Our role in the Biotechnology ecosystem – Better healthcare; Access & more precise coverage

**Aging population challenges**
~727 m persons aged 65+
projected to double by 2050

**Life style / Dietary challenges**
~463 m adults suffering from diabetes
projected to double by 2050

**Environmental challenges**
Air pollution killing ~ 7 m people p.a.
projected to sharply increase

**Regulatory processes**

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**Healthcare policies**

**New technologies – AI/ ML, RNA-, iPSC, gene- and cell therapy**
AI capabilities expected to be almost limitless

**Personalised medicine – Diagnostics, biomarkers, targeted therapies**
Precision medicine US$ 60 billion in 2020 growing at a CAGR >10%

**Clinical stratification Research, basic science, IT**
Today - success rate of only ~11% for drugs moving from Phase I towards approval



Sources: https://www.un.org/development; https://idf.org/; www.ResearchAndMarkets.com www.who.com; https://www.biopharmatrend.com, Evotec estimates

# Innovation hub that meets industry needs

## Value chain evolution

**Old model**

In-house front-end R&D → Fixed-cost discovery & development platforms → Fixed-cost clinical trials platforms

Integrated but inefficient; Blockbuster focus, high fixed cost, low flexibility

**Current models**

Incubators, Mid-size Pharma, Virtual small Biotech, Capability-based CROs, Large Biotech, Big Pharma, Foundations, VCs, Tech Cos

Fragmented, low integration, loss of expertise and data for AI/ML

**Evotec Innovation Hub**

- Academia
- Biotech
- Foundations
- Pharma

- Multi-modality integrated execution
- Cutting-edge technology at scale
- AI/ML exploitation of data
- Efficiency-driven shared economy

Patient data; High integration / speed; Exploitation of latest technologies, and data for AI/ML

# Bringing the industry closer together, to learn faster together

## Evotec's founding vision

*„The goal of evolution is not one single human as such, it is mankind."*

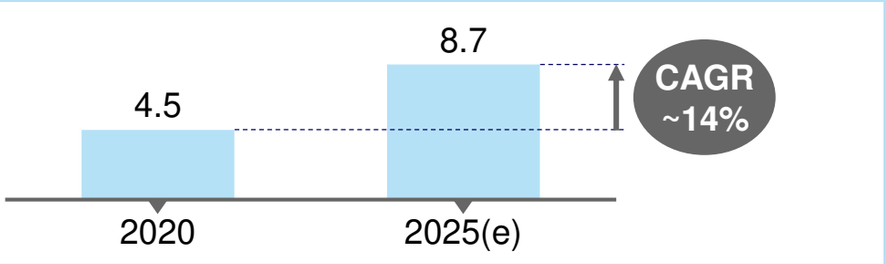
Manfred Eigen
1927–2019, Co-founder of Evotec,
Nobelprize 1967

Source: Allianz, Handelsblatt Juli 2020

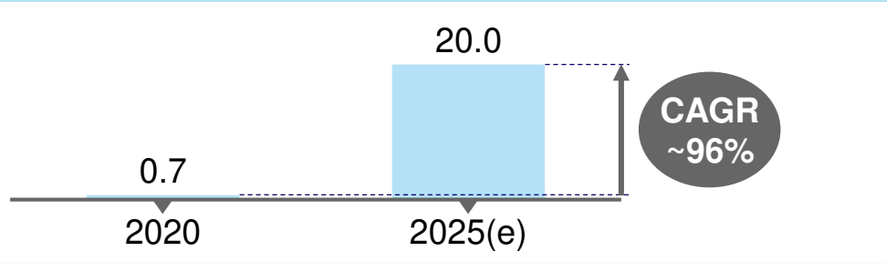
# Macrotrends support vision of precise and accessible drugs

## Growth drivers for the future

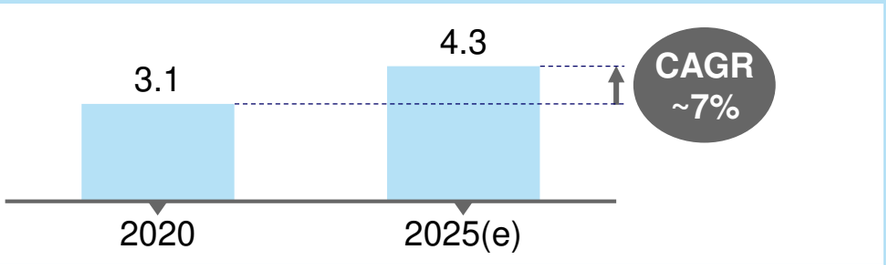
**RNA analysis/transcriptomics market[1)]**
in US$ bn



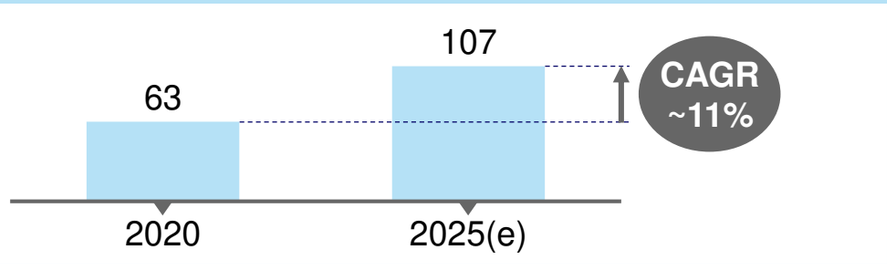

**Global AI market in drug discovery[2)]**
in US$ bn




**Global drug discovery external innovation market[3)]**
in US$ bn




**Global precision medicine market[4)]**
in US$ bn



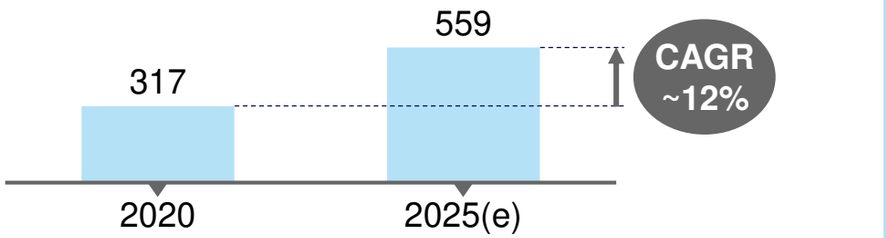



[1)] Reporterlink: RNA Analysis / Transcriptomics Market by Product, Technology, Application, End User, COVID-19 Impact – Global Forecast to 2025, Evotec estimates
[2)] Deep Knowledge Analytics (DKA) titled 'Landscape of AI for Drug Discovery and Advanced R&D Q2 2019', Evotec estimates
[3)] https://www.grandviewresearch.com/press-release/global-drug-discovery-outsourcing-market, Evotec estimates
[4)] https://www.gminsights.com/ Feb 2020, Evotec estimates

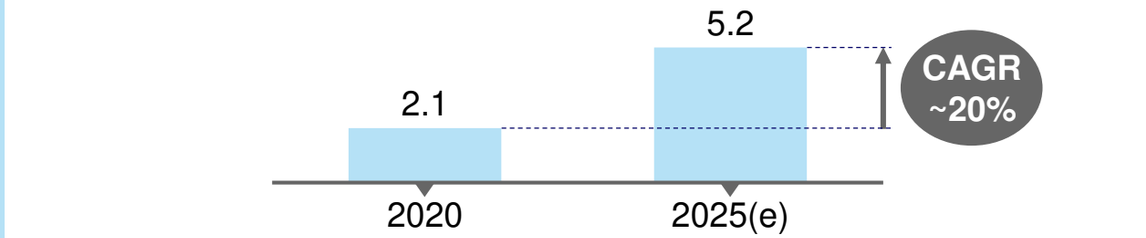
# Multimodality increasingly opens new doors to cures

Small molecules, biologics, cell and gene therapy

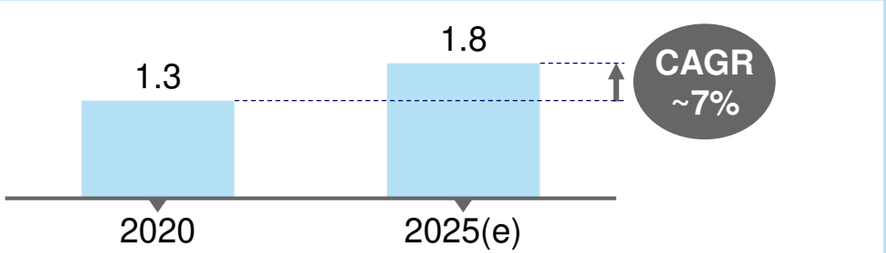
**Global biologics market[1)]**
in US$ bn



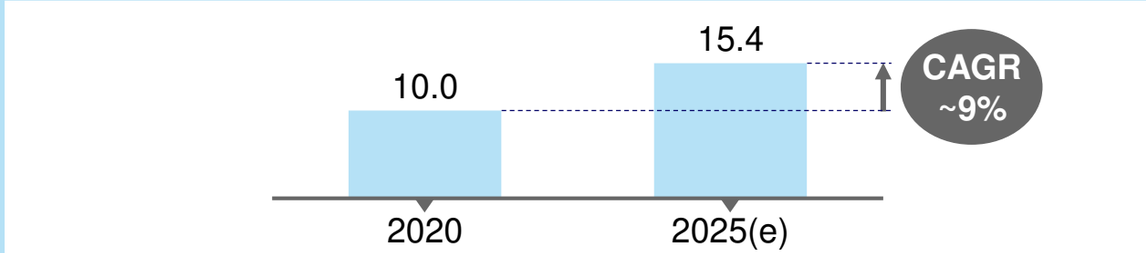

**Global gene therapy market[2)]**
in US$ bn




**Global antisense & RNAi therapeutic market[3)]**
in US$ bn




**Global stem-cell therapy market[4)]**
in US$ bn

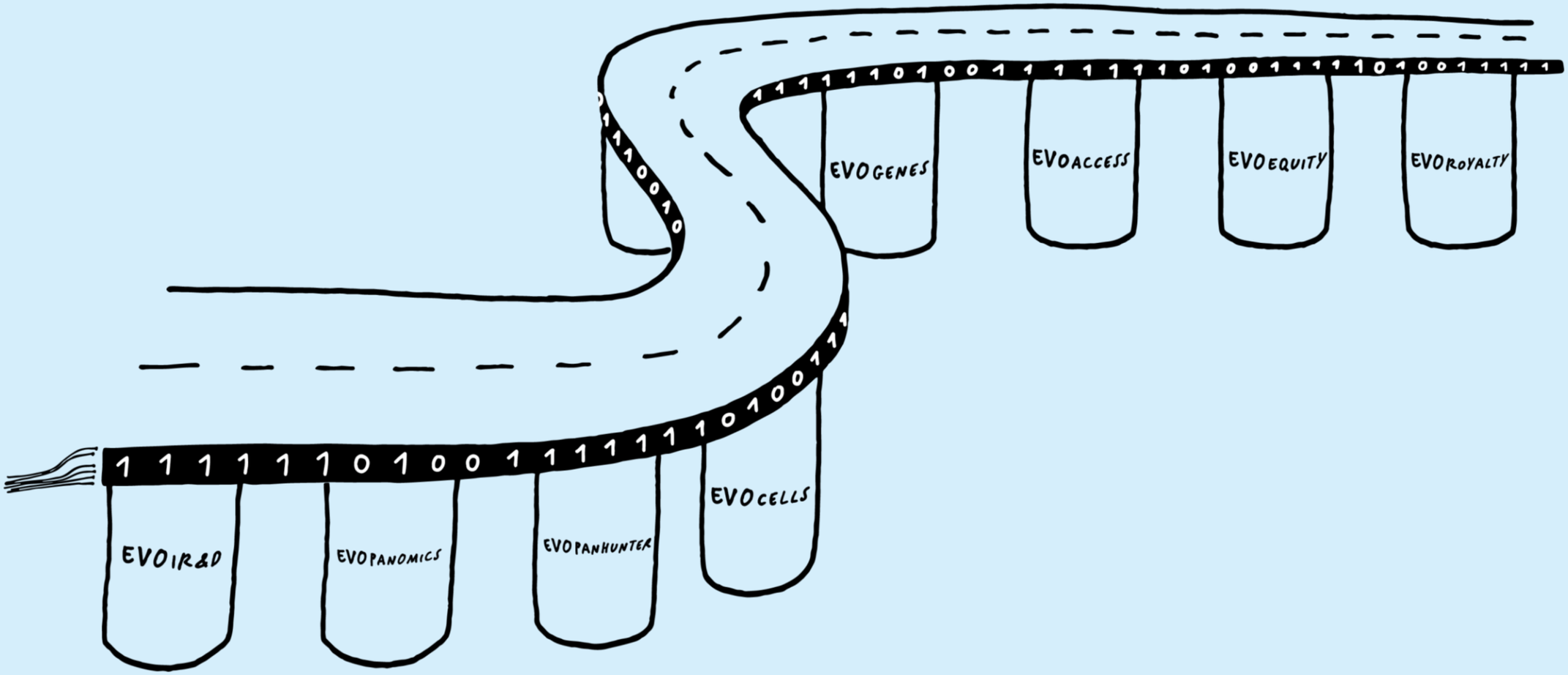





[1)] https://www.reportsanddata.com/report-detail/biologics-market, Evotec, estimates
[2)] https://www.grandviewresearch.com/industry-analysis/gene-therapy-market, Evotec estimates
[3)] https://www.grandviewresearch.com/press-release/antisense-rnai-therapeutics-market, Evotec estimates
[4)] https://www.grandviewresearch.com/industry-analysis/stem-cells-market, Evotec estimates

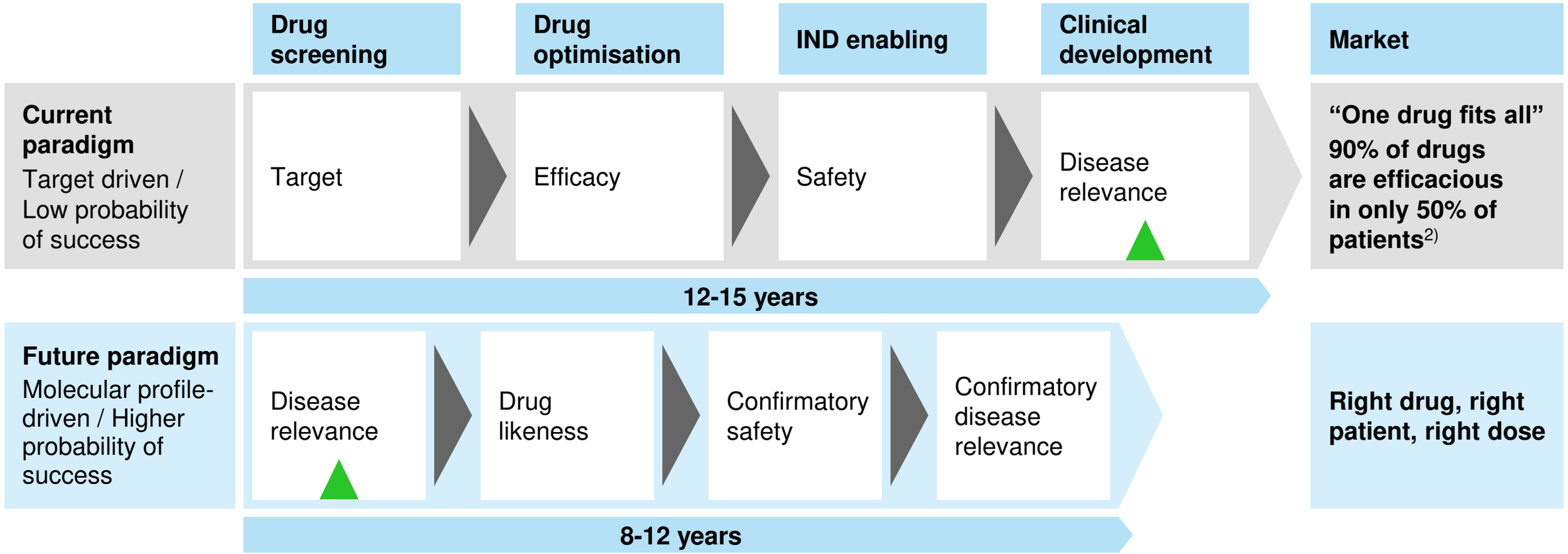
# Data & science to deliver speed and higher predictive efficacy

Eight building blocks of the data-driven R&D Autobahn to Cures



# Molecular disease profiles and AI/ML drive paradigm shift

Disease relevance is paramount to change clinical success rates[1)]






1) 54% of Phase III trials fail due to inadequate efficacy: Fogel DB. Factors associated with clinical trials that fail and opportunities for improving the likelihood of success: A review. Contemp Clin Trials Commun. 2018;11:156-164. Published 2018 Aug 7. doi:10.1016/j.conctc.2018.08.001.

2) Regulatory Toxicology and Pharmacology; Volume 32, Issue 1, August 2000; Pages 56-67; Journal of Health Economics Volume 47, May 2016, Pages 20-33; Clinical development success rates for investigational drugs; Nature Biotechnology volume 32, pages40–51(2014); Evotec estimates

# Leadership in efficiency, data, science, multimodality and access

What we offer – Key growth drivers for high-impact and high-value business

**R&D efficiency platforms[1)]**

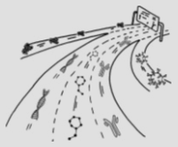
**From high quality stand-alone services to EVO*iR&D***

**AI/ML & Precision medicine platforms**

**From molecular platforms via iPSCs to EVO*panOmics* & EVO*panHunter***

**Just – Evotec Biologics[1)]**

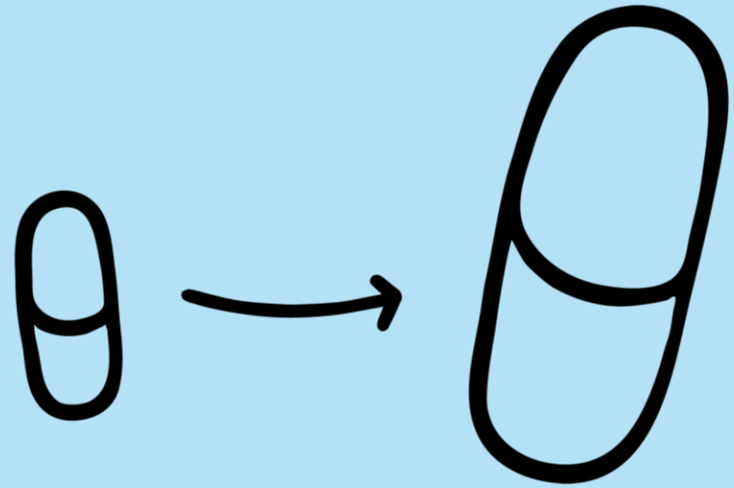
**With EVO*access* from J.HAL[SM] to J.POD®**



**Multimodality drug design**

**From small molecules & biologics to EVO*cells* & EVO*genes***

**EVO*equity* & EVO*royalty***





[1)] Also accessible as stand alone “Fee for Service Work-packages”

# Clearly defined work packages allow increased access

## Capabilities & expertise overview

### Industry needs

### Capabilities & expertise create multimodality & data-driven R&D Autobahn for growth

**R&D efficiency platforms[1)]**

- Target ID & validation
- Hit identification
- Sample management
- DMPK & ADME-Tox
- Research Informatics
- Bio Reagents
- *In vivo* biology
- *In vivo* Pharmacology
- Biomarker discovery
- Integrated CMC
- Lead optimisation
- INDiGO

**AI/ML & Pre-cision medicine platforms**

- **EVO***panOmics*
- **EVO***panHunter*
- iPSC Lighthouse
- ScreenSeq™
- ScreenPep™
- J.HAL℠ Biology Prediction

**Just – Evotec Biologics[1)]**

- J.DISCOVERY™ Molecule Discovery
- J.HAL℠ Biology Prediction
- J.MD™ Molecule Design
- J.P3® Process & Product Design
- J.POD® Clinical & Commercial Manufacturing

**Multimodality drug design**

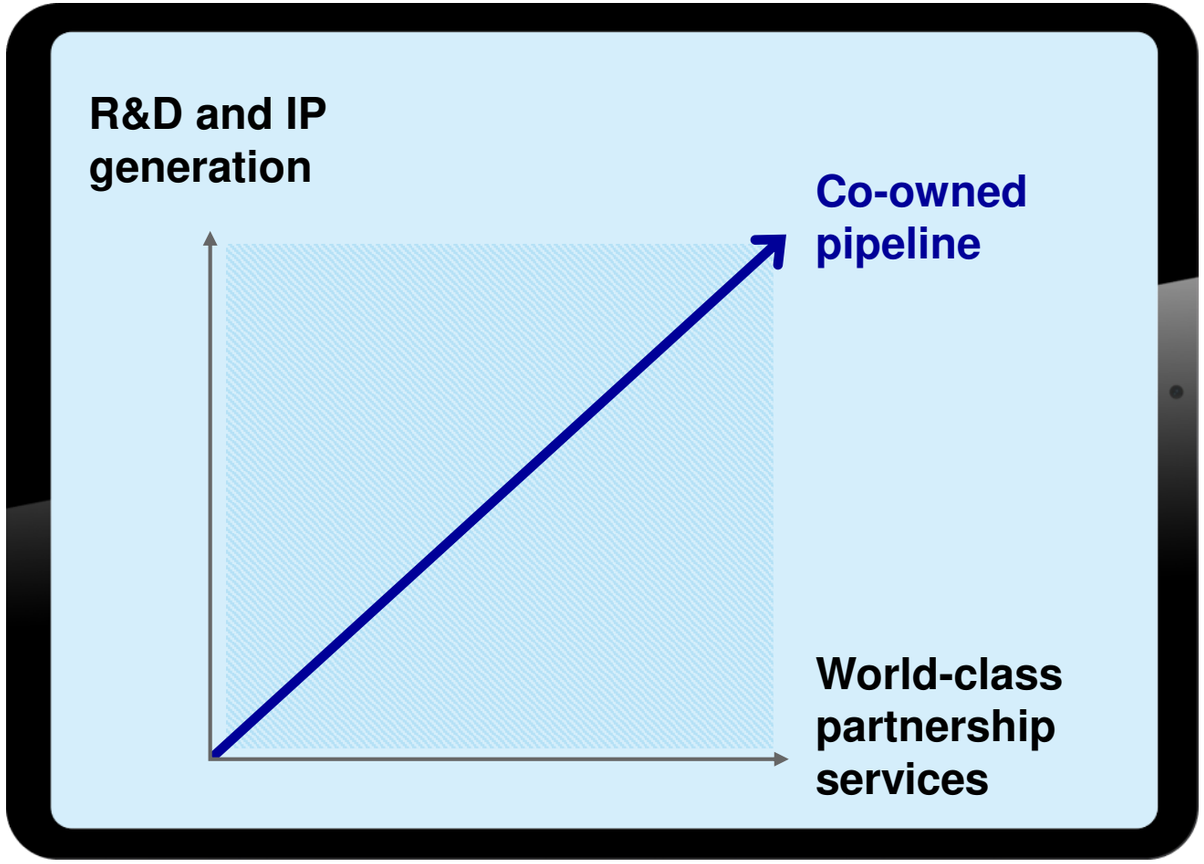
- **EVO***cells*
- **EVO***genes*
- Antibodies & Bifunctionals
- Small molecules
- Antisense[1)]
- Protein degradation
- Exosomes
- RNA



[1)] Also accessible as stand alone “Fee for Service Work-packages”

# Novelty, precision, and excellent execution drive co-ownership

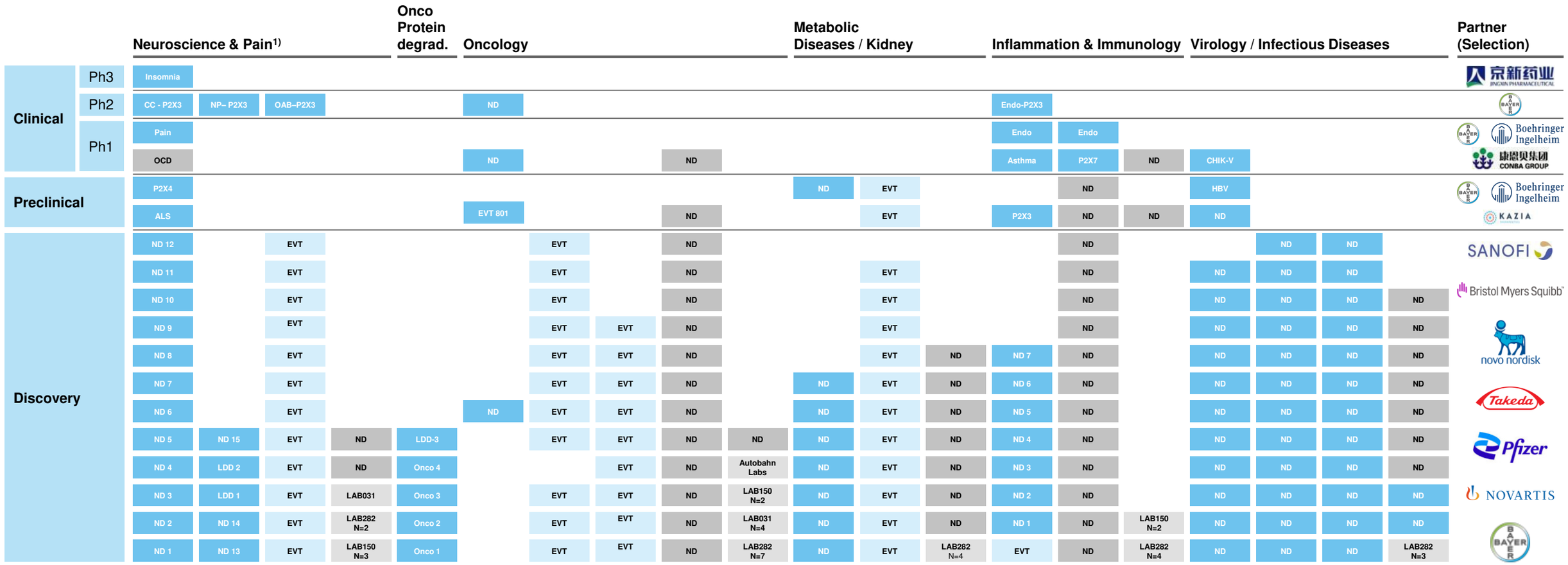
## Unique business model




| | |
|---|---|
| 1 | **R&D efficiency platforms**<br>Integrated drug discovery contributing to key inventive steps |
| 2 | **Indication-driven target pipelines**<br>Novel targets P2X3, B1, A2a, … |
| 3 | **Just – Evotec Biologics**<br>From J.HAL℠ to J.POD®s |
| 4 | **BRIDGEs and operational ventures**<br>beLAB2122, LAB**282**, LAB150, Curexsys, Exscientia, … |

# „The Iceberg“ is constantly growing and gaining visibility

## >200 proprietary projects



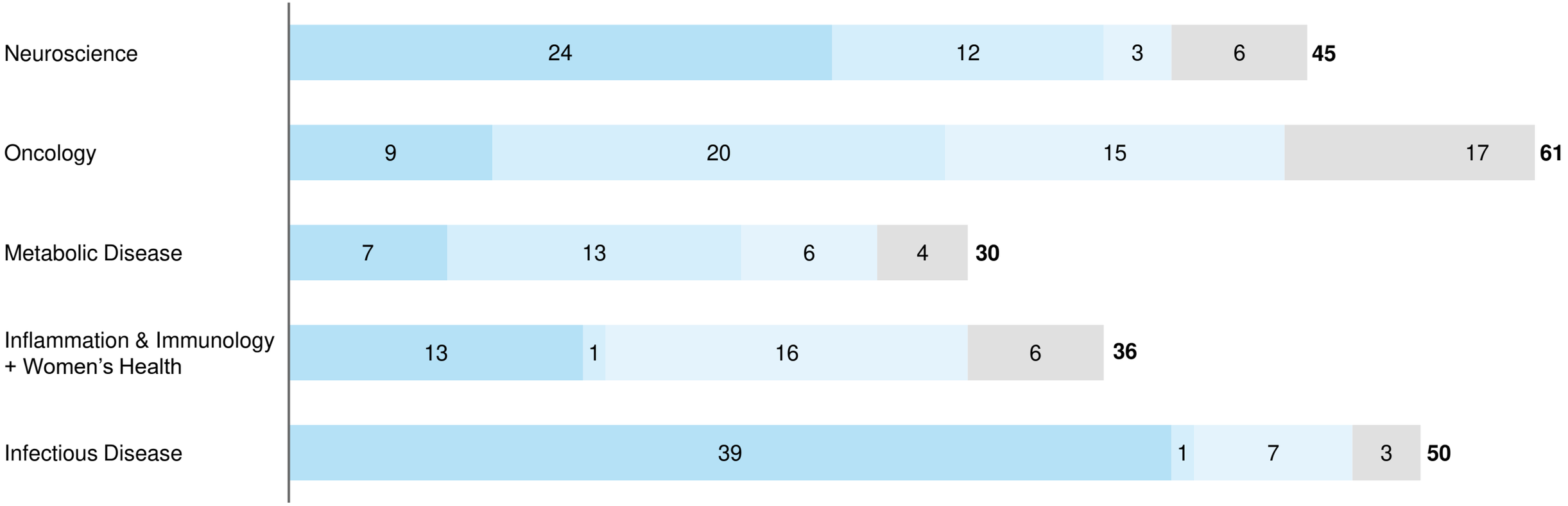



[1)] Multiple projects based on EVT proprietary iPSC platform; P2X3 in RCC is visible in our Neuroscience franchise

# > 200 proprietary projects in key disease areas

Broad and deep pipeline of product opportunities

## Number of drug development candidates in pipeline per indication

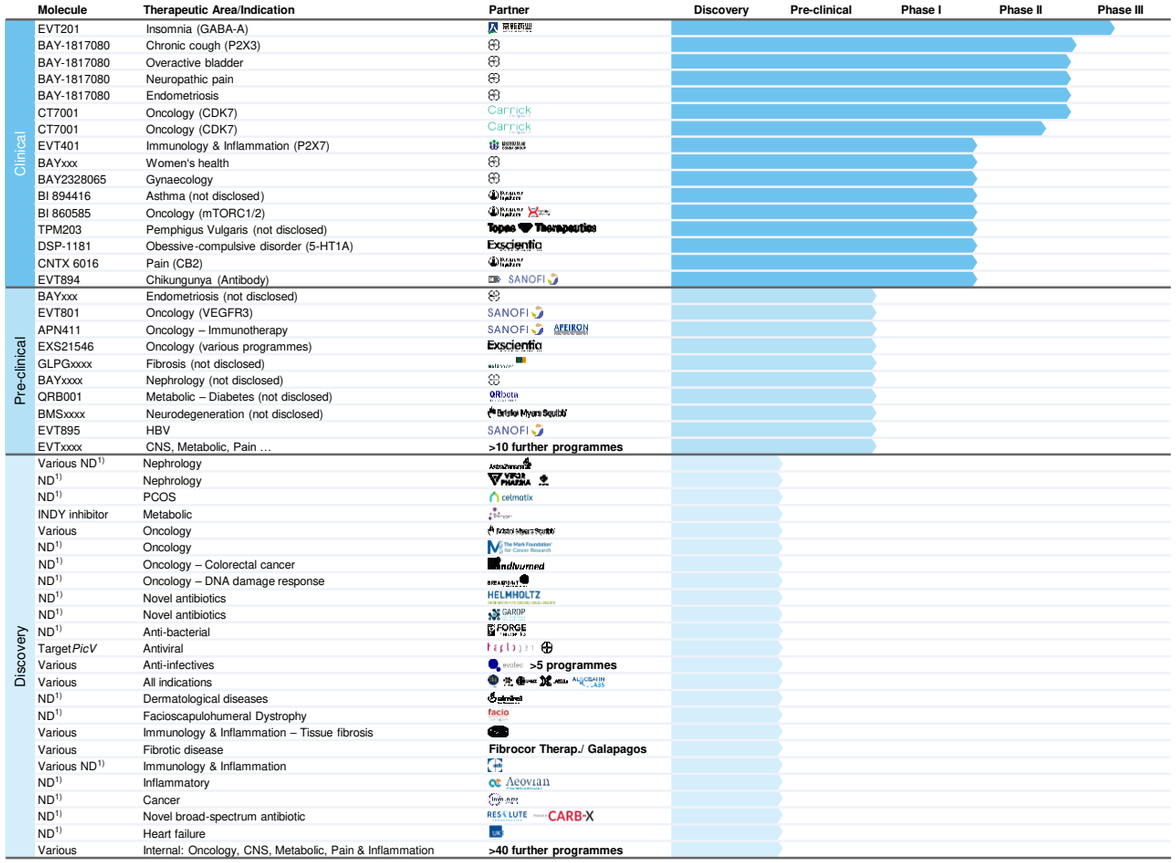


# “Evotec Inside” – Fully invested pipeline gaining visibility

## Progress of drug candidates in advanced stages

### Selected pipeline events

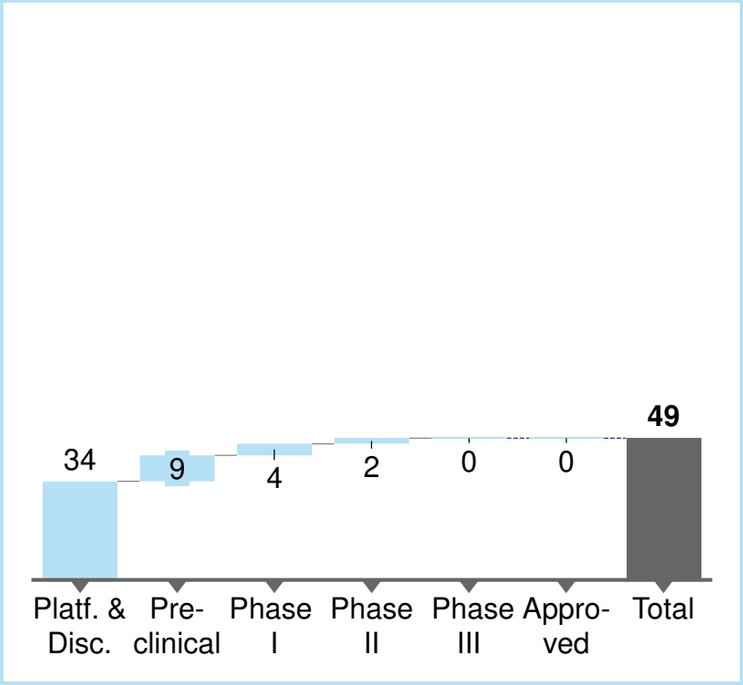
1. Phase IIb with Bayer in RCC (Eliapixant) ✓
2. Phase II with Bayer in Overactive bladder (Eliapixant) ✓
3. Phase II with Bayer in Endometriosis (Eliapixant) ✓
4. Phase II with Bayer in Neuropathic pain (Eliapixant) ✓
5. Phase II with BI in Oncology / Pain
6. Phase II with Bayer in Gynaecology (B1 antagonist)
7. Phase I in Chikungunya virus ✓
8. Phase I with BMS in CNS
9. Phase I with Exscientia in Oncology (A2a) ✓
10. Phase I with Sanofi in Immuno-oncology
11. Phase I with Kazia in Oncology (EVT801)
12. Phase I in HBV Cure
13. Multiple co-owned equity companies will progress in clinic (e.g. Topas, Forge, Carrick, Fibrocor, …)



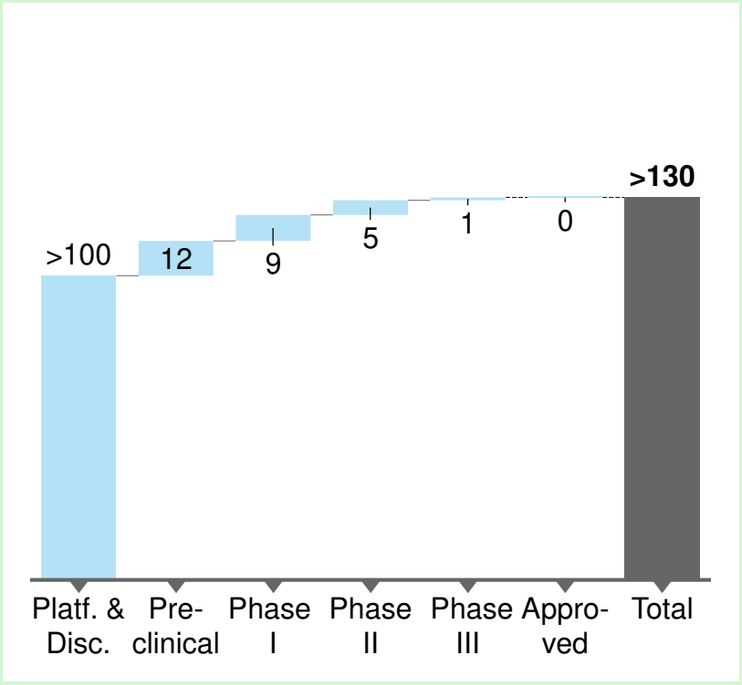
# Building a massive co-owned clinical pipeline

## EVT Innovate pipeline evolution 2015-2025 (e)

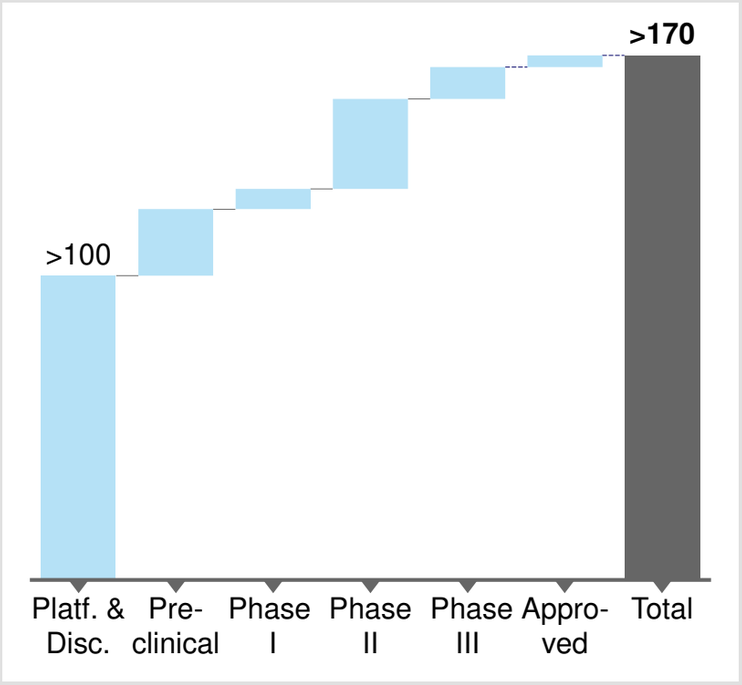
### 2015
# of projects




### 2021[1)3)]
# of projects




### 2025(e)[2)3)]
anticipated # of projects






[1)] Does not include projects that were completely stopped, e.g. Diap277, EVT302
[2)] Not risk adjusted
[3)] Does not include EVT equity investments

# Our data-driven R&D Autobahn to success

## Summary

**Integration drives differentiation**

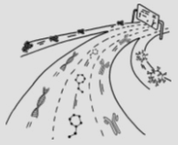
Knowledge, experience and know-how creates success loop in research, discovery and development, high performance and inventive steps

**AI/ML predictions drive precision and speed**

Creating and exploiting data in optimised infrastructures; AI/ML in molecular design and predictive ADMET accelerating precision medicine

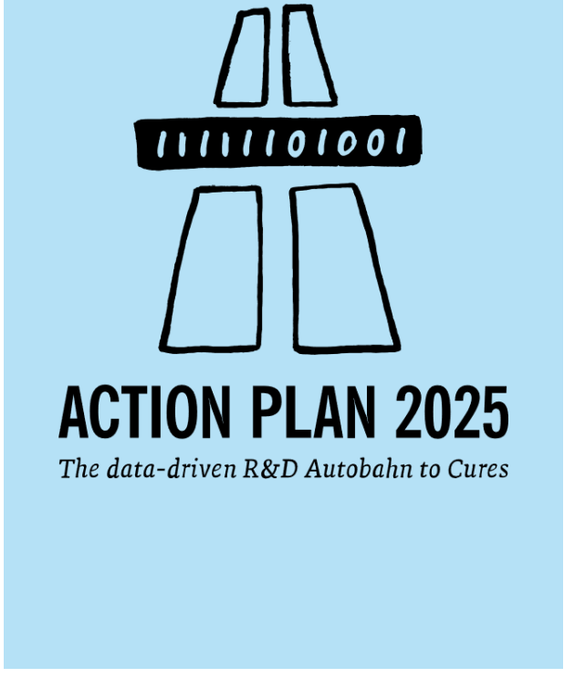
**Access to more precise biologics**

AI-driven integrated process from discovery to commercial manufacturing of biologics



**Multiple sources for co-ownership feed massive pipeline building process**

- Novel small molecule targets, biologics, gene therapies; iPSCs, …
- BRIDGEs, and operational Ventures support co-owned pipeline vision



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# Data-driven precision medicine iPSC – Witnessing a new paradigm

*World-leading iPSC platform enabling transformative therapeutic concepts*

# Agenda

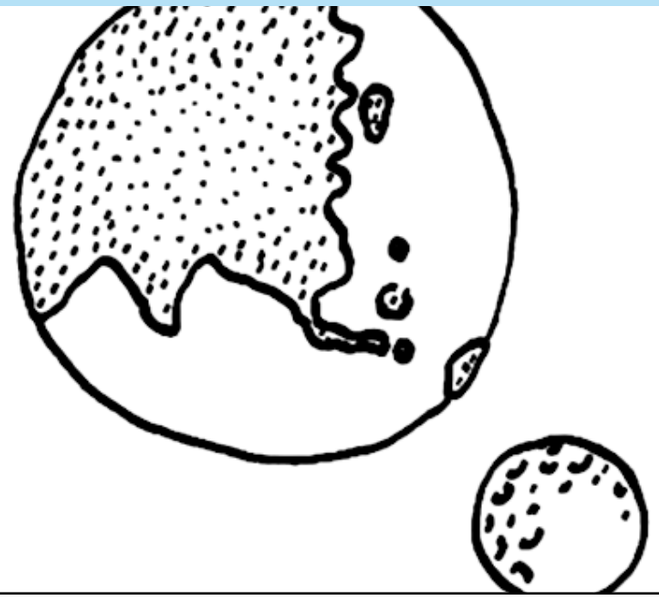
**Action Plan 2025 – The data-driven R&D Autobahn to Cures**
Our business strategy

**Data-driven precision medicine**
iPSC – Witnessing a new paradigm

**From J.HAL℠ to J.POD®**
AI/ML-driven integrated process from discovery to commercial manufacturing of biologics

**BRIDGEs**
From academic translation to patients

**Financials – Guard rails of Action Plan 2025**



*“Patient-derived disease models are the new standard of prediction-driven drug discovery.“*

**Cord Dohrmann**

# Precision medicine is our focus

Patient databases & models combined with **EVO***panHunter*/**EVO***panOmics* & Multi-modality

**Molecular patient databases**

- Re-defining health and disease via molecular disease profiles

**Patient (iPSC) – derived disease models**

- Focus on disease relevance throughout the process
- Comprehensive compound profiling

**Diagnostics and biomarkers**

- Precision diagnostics
- Precise tracking of disease progression

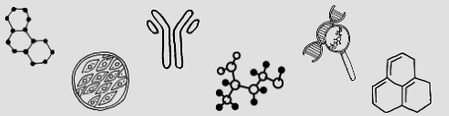
**Genomics – Transcriptomics – Proteomics – Metabolomics**
Industrialised data generation

**EVO***panOmics*
Data generation

**Data science – Machine learning / Artificial intelligence – Bioinformatics**
AI/ML-driven data analytics

**EVO***panHunter*
Data analytics

**Small molecules – Antibodies – Bifunctionals – Cell therapy – Antisense – Gene therapy**
Multi-modality



*“iPSC modelling is the road to success for devastating diseases.“*

**Sandra Lubitz**

# iPSC technology shifts the drug discovery paradigm

## Focus on disease relevance from the start

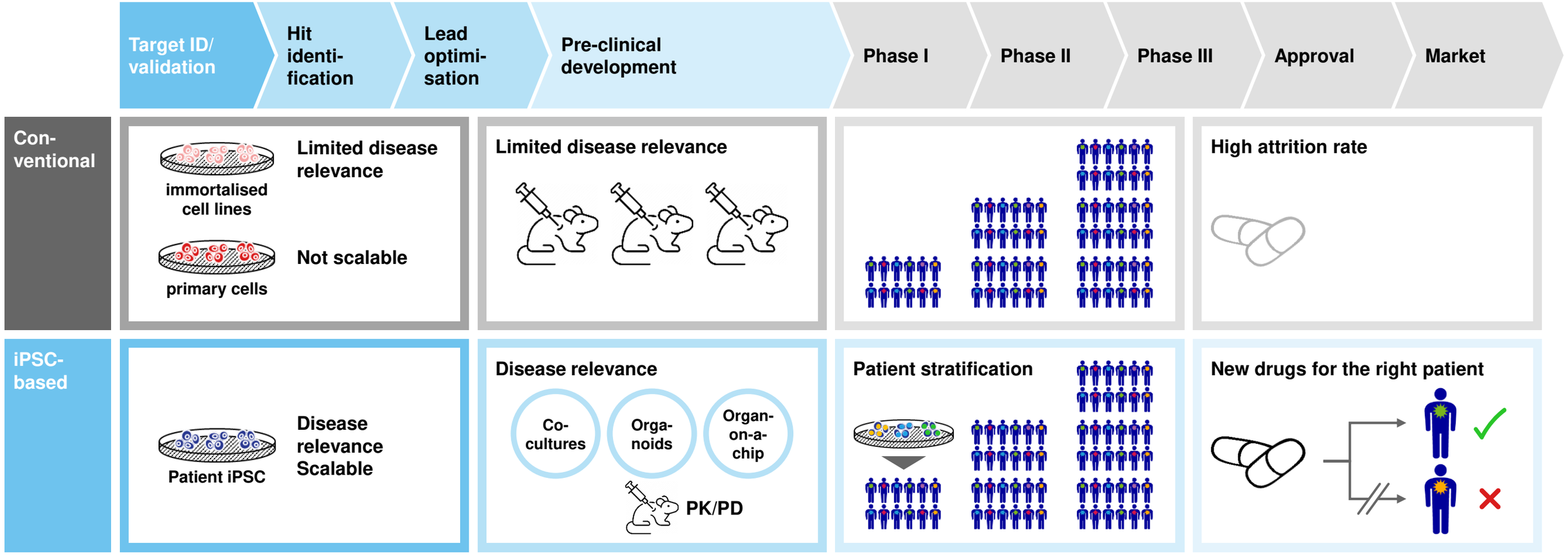
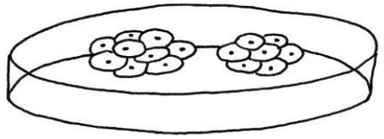




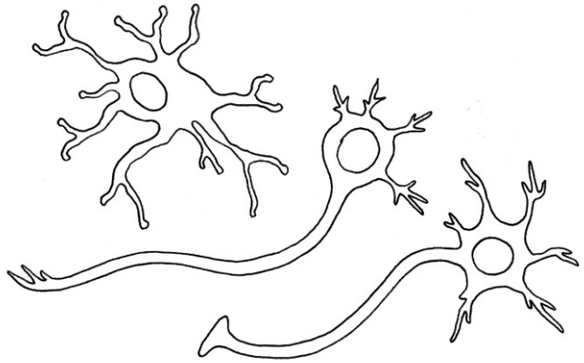

Figure adapted from DOI: https://doi.org/10.1016/j.molmed.2020.09.013

# World leading iPSC drug discovery platform

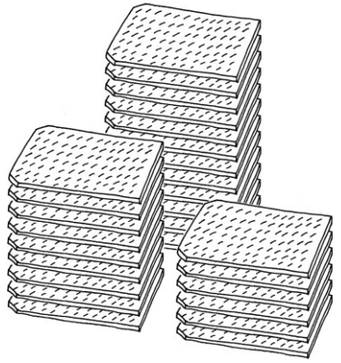
Industrial scale manufacturing with best-in-class quality



Patient specific iPSC



Disease-affected cell types



384-well plates

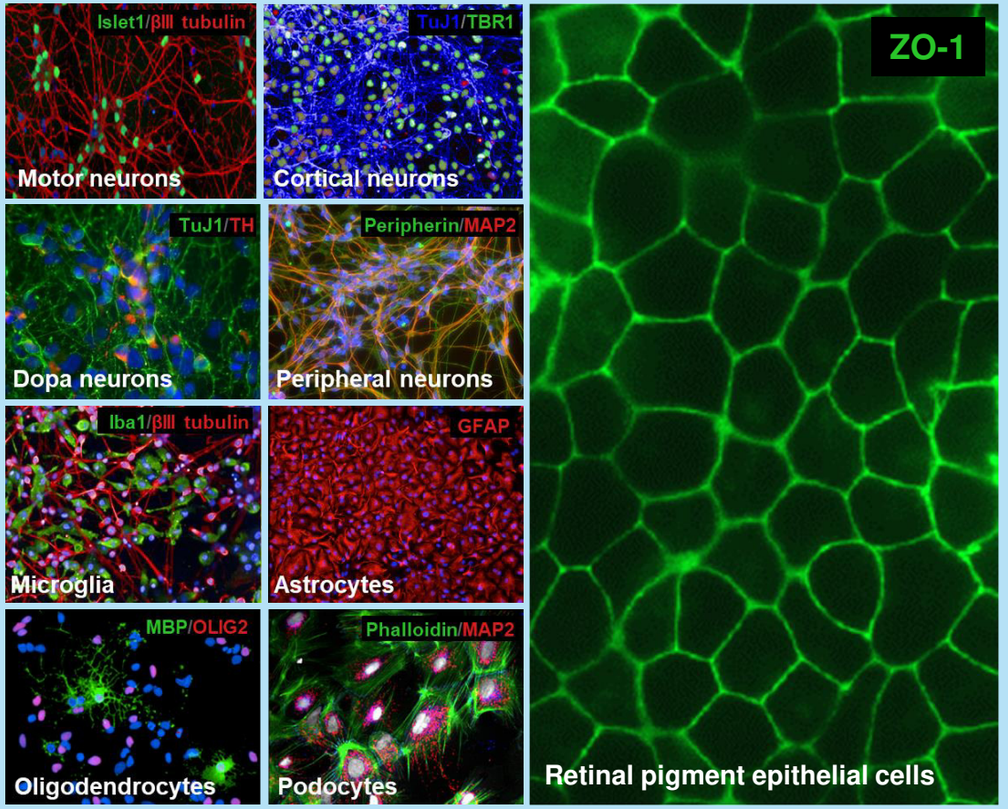
| Large iPSC bank | iPSC expansion | Optimised differentiation protocols for desired cell types | Large scale cell manufacturing | Disease modelling for drug discovery |
|---|---|---|---|---|
| | | • Short duration<br>• High reproducibility<br>• Large cell yield | • Industrial scale bioreactors<br>• Cryopreserved batches<br>• Strict quality control | • Automated process in 384-well format<br>• High-throughput<br>• > 15 disease models established |

# Diverse human disease models established for drug discovery

Highest quality control standards applied for cell manufacturing

**Broad panel of cell types**

- Microglia
- Motor neurons
- Cortical neurons
- Dopaminergic neurons
- Peripheral neurons
- Oligodendrocytes
- Astrocytes
- Podocytes
- Proximal tubular epithelial cells
- Glomerular endothelial cells
- Beta cells
- Retinal pigment epithelial cells
- Cardiomyocytes
- Natural killer cells
- T cells
- Macrophages
- …



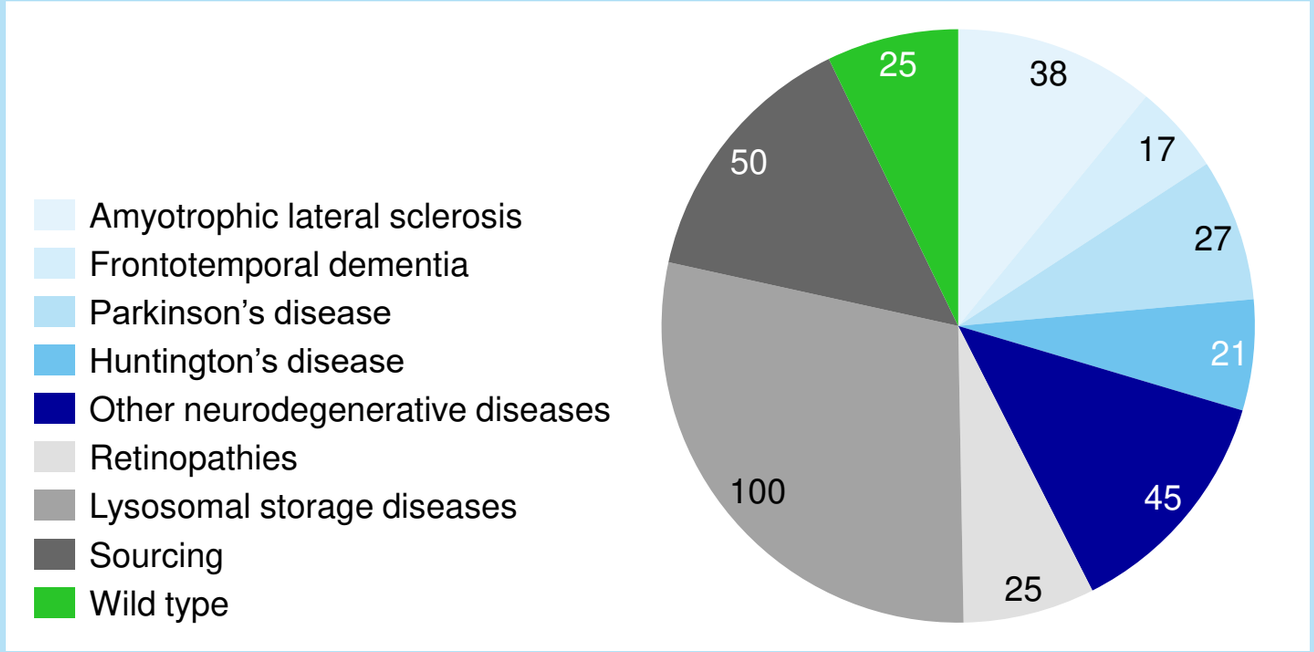

**Quality control**

- **Batch testing**
  - Specific markers ✓
  - Sterility testing ✓
  - Viability ✓
  - Functional testing ✓
- **Automation**
  - Sterility testing ✓
  - Real-time QC ✓
  - Reproducibility & robustness ✓

# >300 patient-derived validated iPSC lines

Broad panel of disease-specific genotypes for patient stratification

**iPSC bank**




- High quality iPSC generation
  - Standardised patient consents
  - Standardised protocols
  - Highest QC standards
- Robust performance of iPSC lines in different disease models for HTS

CENTOGENE THE RARE DISEASE COMPANY | CENSO BIOTECHNOLOGIES | Fraunhofer | HSCI HARVARD STEM CELL INSTITUTE 1000 scientists. One goal. Discovering cures. | REPROCELL | EBERHARD KARLS UNIVERSITÄT TÜBINGEN

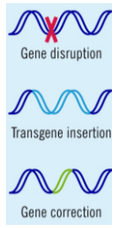
# A growing iPSC tool box to revolutionise pre-clinical development

Modelling human disease in 2D and 3D

## Isogenic controls

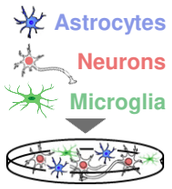
Disease-causing mutations inserted or corrected via genetic modification

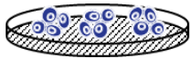
Perfect control to detect disease-relevant phenotypic differences




## Co-cultures

Combining different iPSC-derived cell types to study multicellular interactions during disease



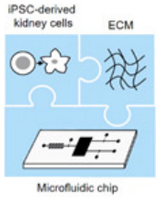
**iPSC**

## Organ-on-a-chip

Miniaturised organ

Bioengineering

Combining iPSC-derived cells into separated compartments on a microfluidic chip

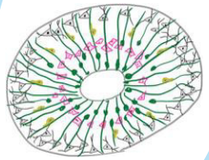



## Organoids

Miniaturised organ

Self organising

Differentiating iPSC in cell aggregates resembling the architecture of the original tissue



*“Precision medicine enables more effective therapies for CNS diseases.“*

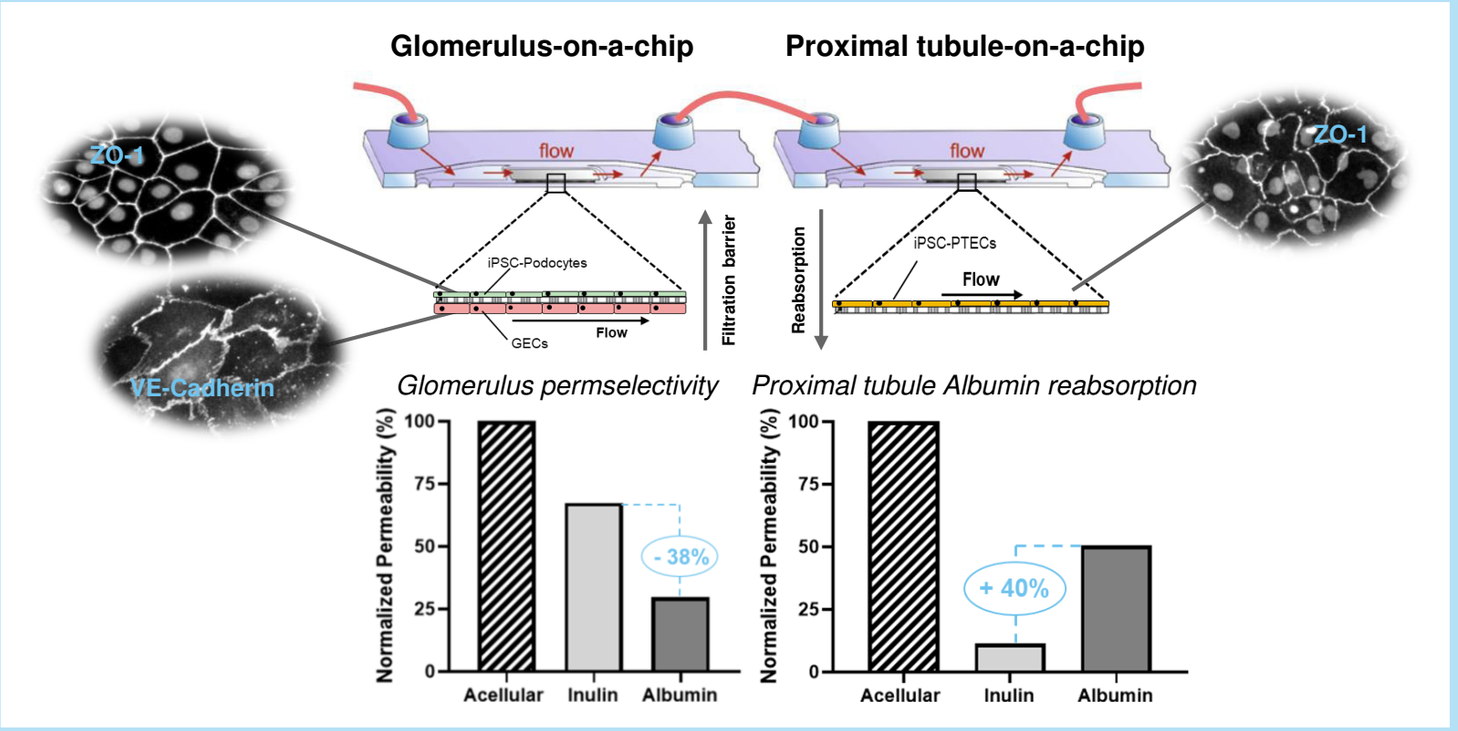
**Rainer Kuhn**

# Modelling nephron function with an organ-on-a-chip iPSC model

## Culturing iPSC-derived kidney cells in microfluidic chips

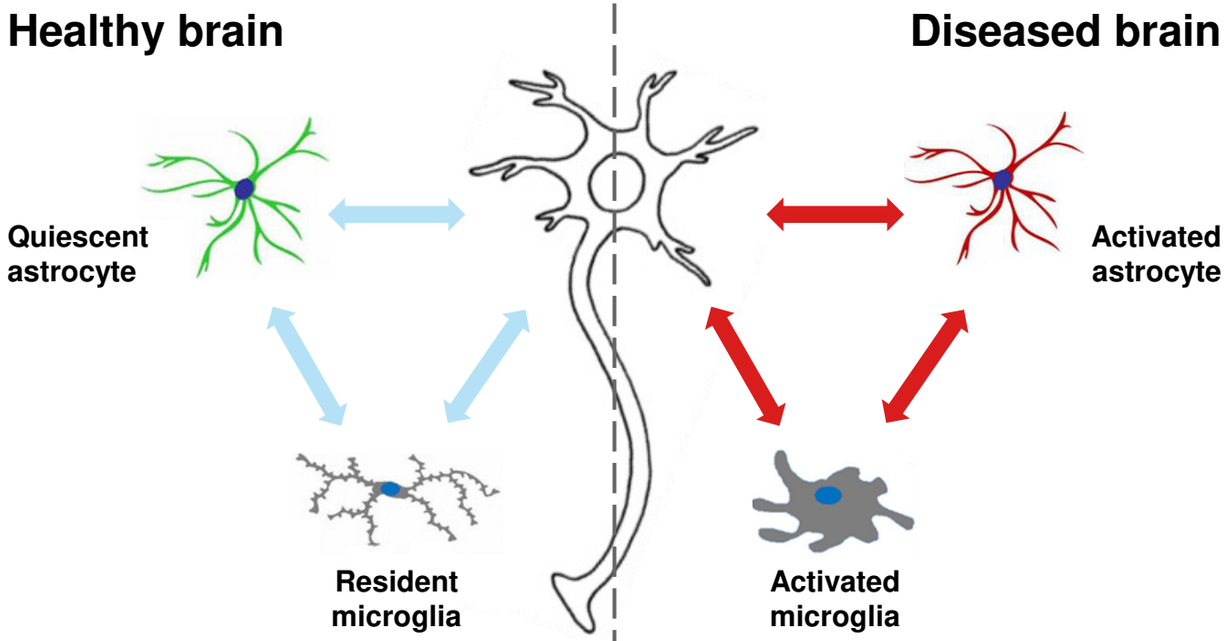
- Albuminuria is a hallmark of chronic kidney disease
- Albumin filtered through glomeruli and reabsorbed at the proximal tubulus
- Nephron-on-a-chip model consists of glomerulus and proximal tubule unit
- Glomerular endothelial cell line (GECs) and iPSC-derived cell types integrated into microfluidic device
  - Podocytes
  - Proximal tubular epithelial cells (PTECs)
- Rapid and robust iPSC differentiation protocols developed for all cell types (< 2 weeks)

### Nephron-on-a-chip



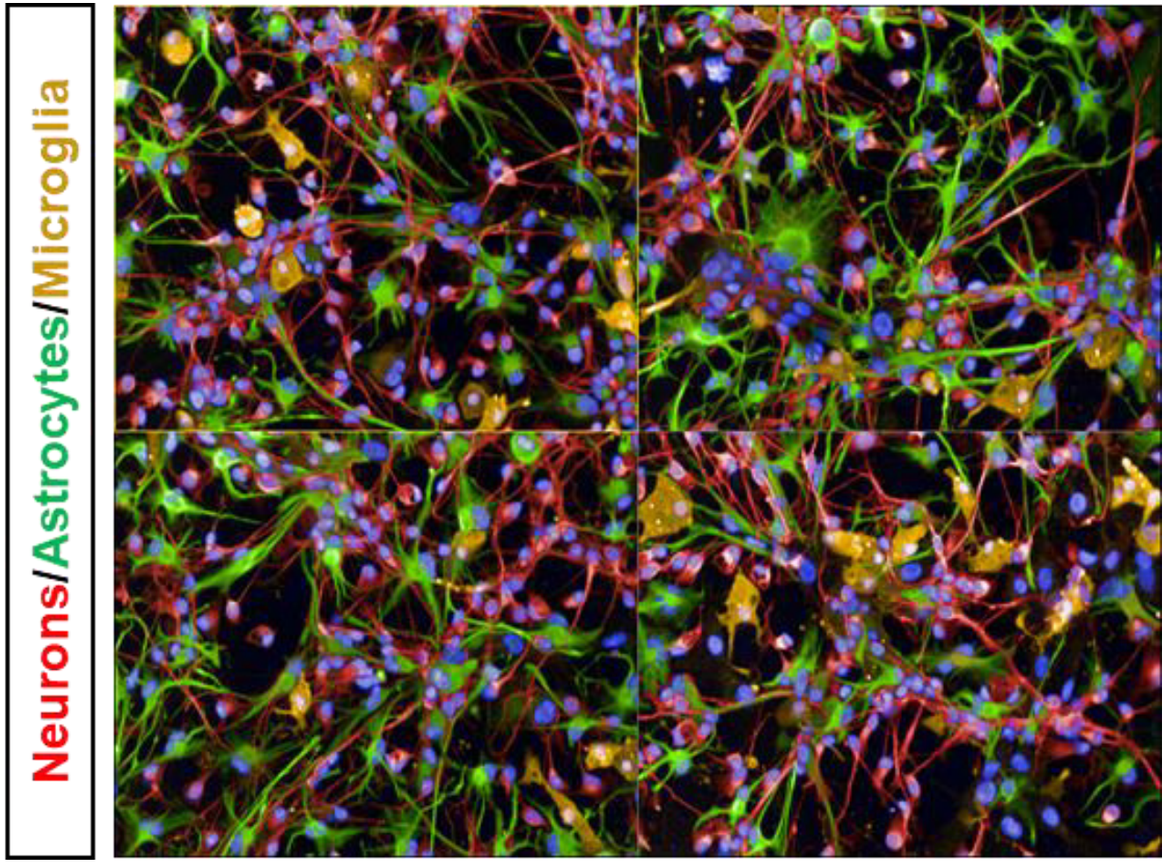
# Modelling neuroinflammation in triple culture iPSC models

Triple cultures reveal changes in microglia gene expression not observed in monoculture



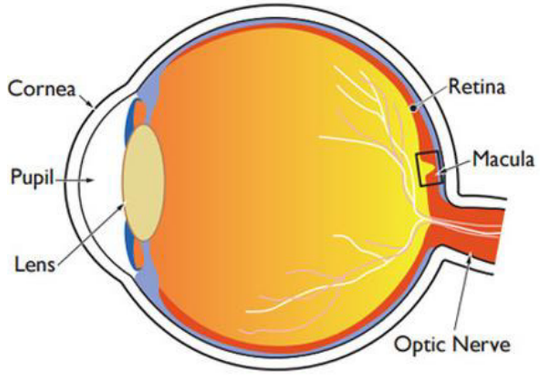

**Hallmarks of neuroinflammation**

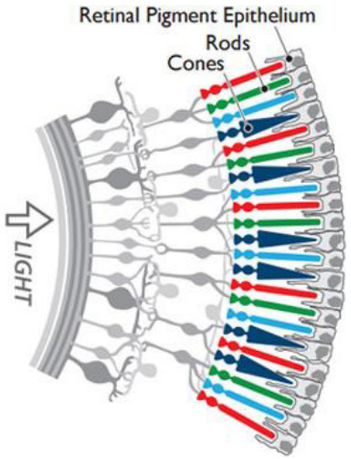
- Elevation of pro-inflammatory cytokines
- Activation of astrocytes and microglia
- Local tissue damage



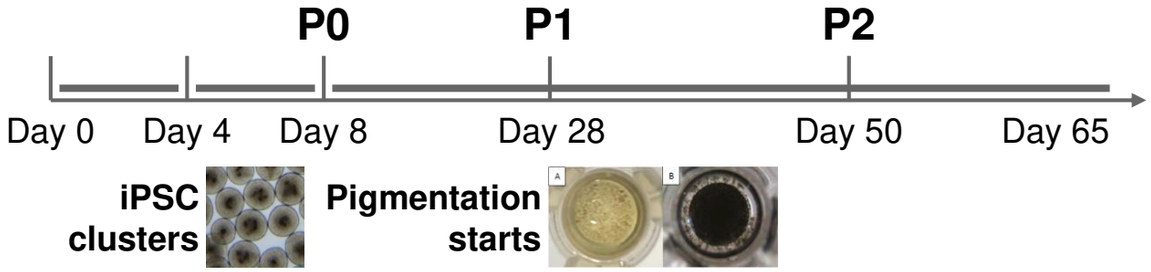
# iPSC models to target retinal dystrophies

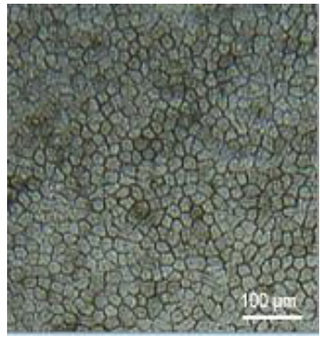
Reversion phenotype screens of molecular signatures in RPE-associated retinal dystrophies



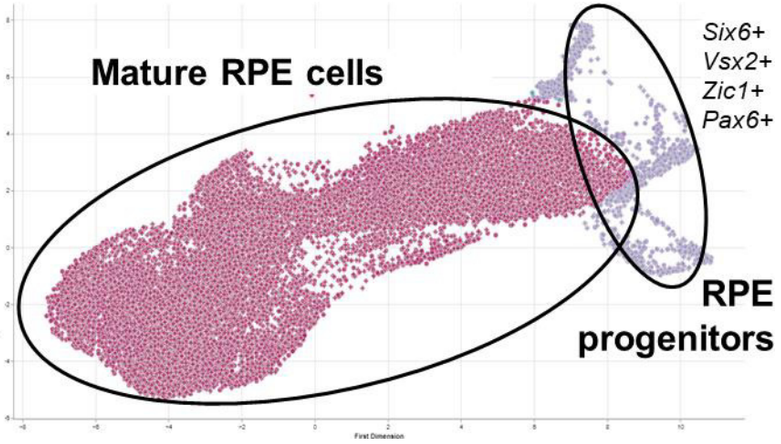




- Retinal pigment epithelial (RPE) cell degeneration is a main driver of many retinal diseases
- Highly efficient and robust iPSC-derived RPE disease models for
  - Age-related macular degeneration
  - Genetic retinopathies




*MITF+*
*PMEL+*
*RLBP1+*
*TJP+*
*BEST1+*
*OTX2+*
*TYR+*
*TYRP1+*
*TTR+*
*PEDF+*
*SERPINF1+*
*EFEMP1+*
*VEGFA+*
*ITGAV+*



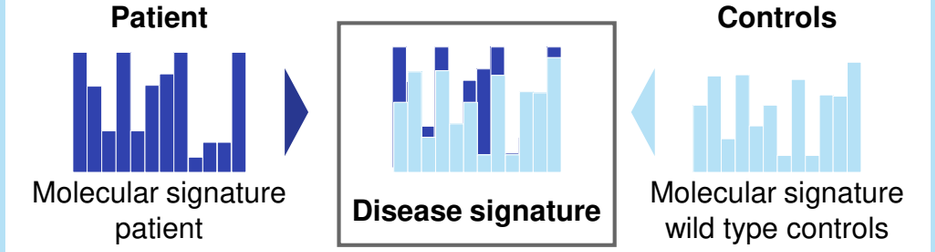



https://www.newwesteyes.net/retinainfo

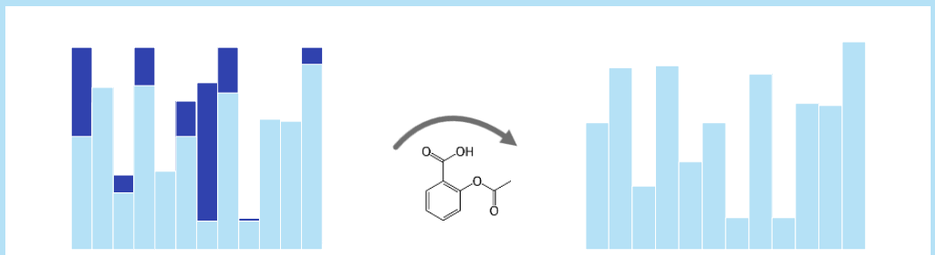
# Patient stratification guides decision on clinical trial design

Identifying responder and non-responder populations for selected drugs

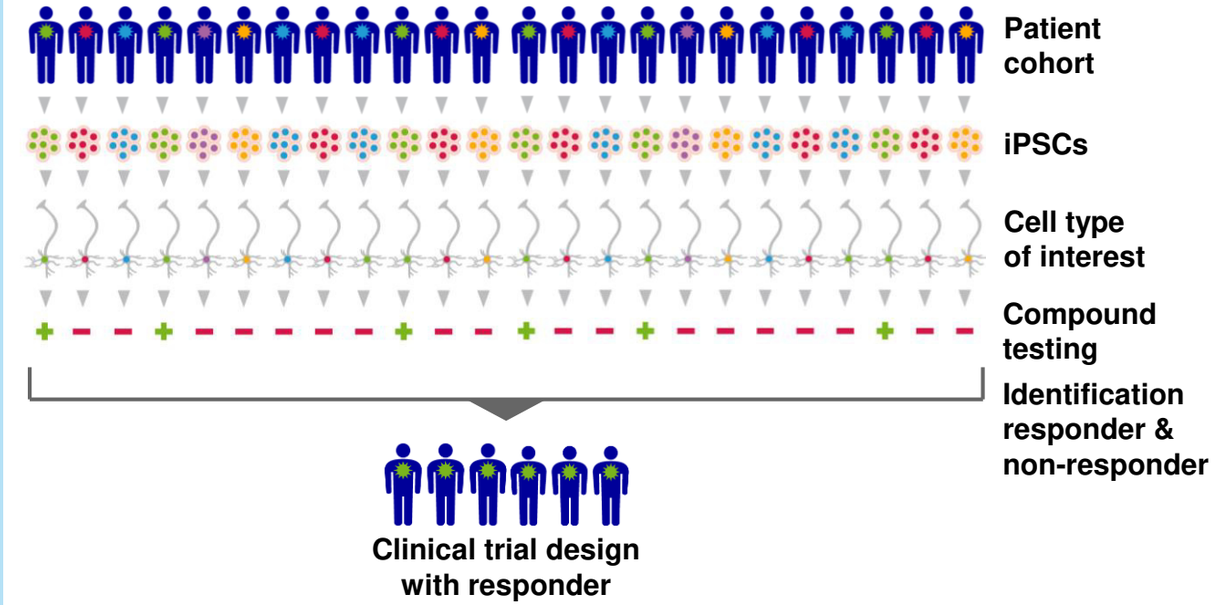
## Identifying molecular disease signature




## Effective drugs normalise disease signature




## Large scale “clinical trial in a dish” models



# The iPSC platform offers numerous partnering opportunities

High-level overview on actionable disease areas

## Partnered areas

**Neurodegenerative Disease**
Reversion phenotype screening

Bristol Myers Squibb™

**Huntington Disease**
Reversion phenotype screening

CHDI FOUNDATION

**> 15 programmes at different stages from assay development to lead optimisation**

## Drug discovery options

**Neuroinflammation**
- Cortical neurons
- Microglia
- Astrocytes
- Oligodendrocytes

**Neurodevelopmental Disease**
- Cortical neurons
- Other cells

**Immuno-oncology**
- Natural Killer cells
- T-cells
- Macrophages

**Lysosomal Storage Diseases**
- Cortical neurons
- Astrocytes
- Microglia
- Macrophages

**R&D collaboration with**

CENTOGENE
THE RARE DISEASE COMPANY

**Retinopathies**
- Retinal pigment epithelial cells

**R&D collaboration with**

CRTD
Center for Regenerative Therapies TU Dresden

**Chronic Kidney Disease**
- Podocytes
- Proximal tubular epithelial cells
- Glomerular endothelial cells
- Nephron-on-a-chip

**Diabetes**
- Beta cells

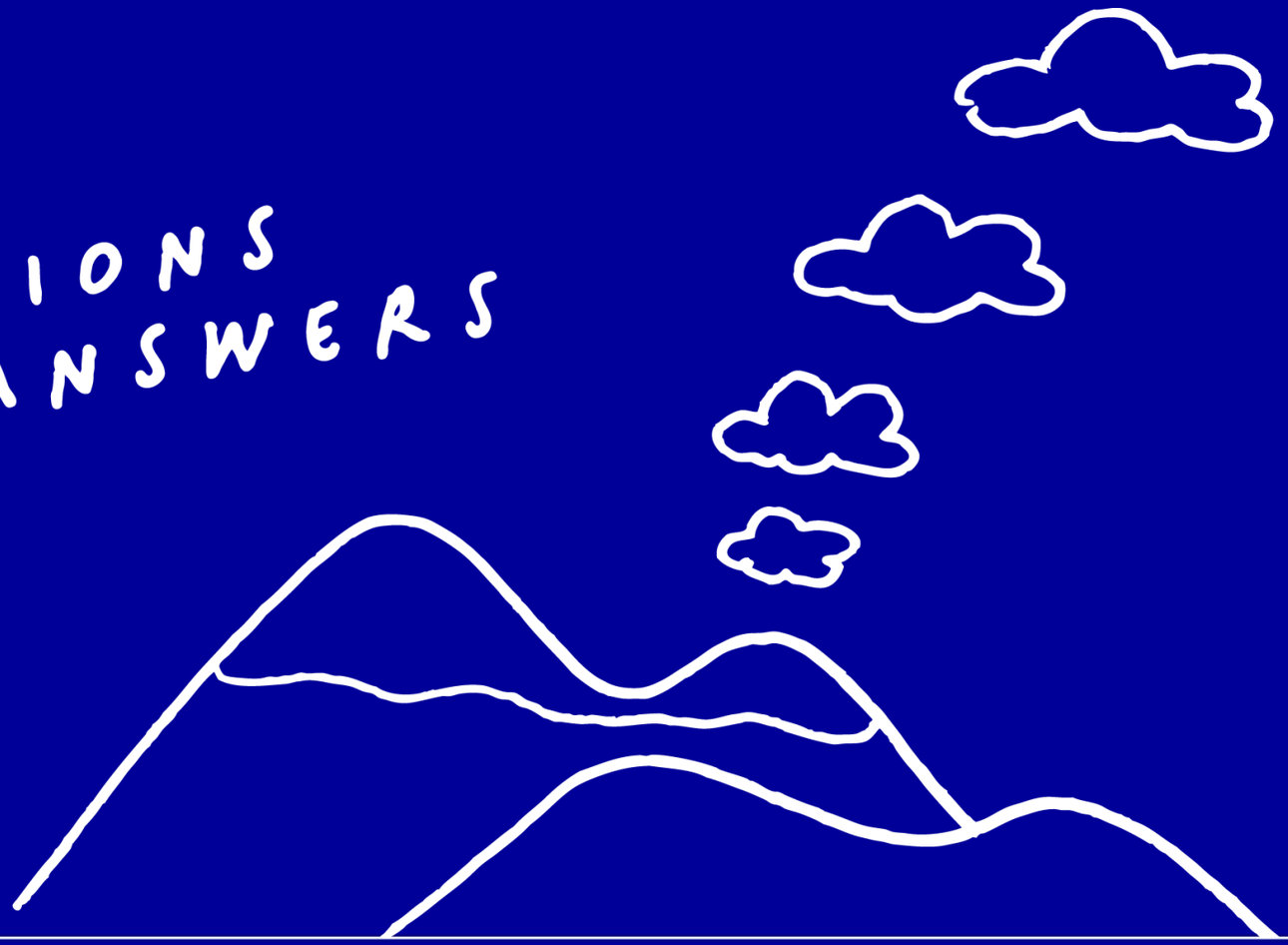
QRbeta THERAPEUTICS

**Cardiac Hypertrophy & Heart Failure**
- Cardiomyocytes

evotec

#RESEARCHNEVERSTOPS

# QUESTIONS AND ANSWERS



evotec

# From J.HAL℠ to J.POD®

*Creating the biologics lane*
*on the multi-modality Autobahn*

*Using the power of data science to deliver*
*enhanced speed, lower cost and predictive efficacy*

# Agenda

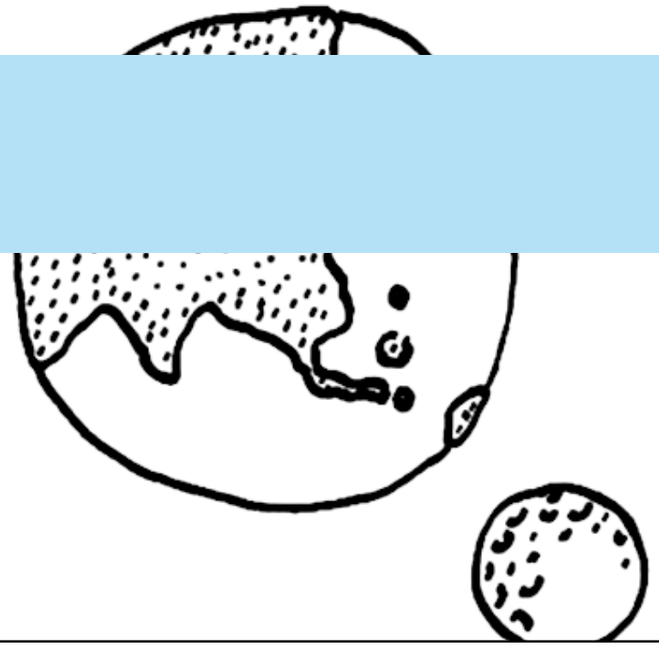
**Action Plan 2025 – The data-driven R&D Autobahn to Cures**
Our business strategy

**Data-driven precision medicine**
iPSC – Witnessing a new paradigm

**From J.HAL℠ to J.POD®**
AI/ML-driven integrated process from discovery to commercial manufacturing of biologics

**BRIDGEs**
From academic translation to patients

**Financials – Guard rails of Action Plan 2025**



*“The combination of data generation and AI/ML exploitation has transformational power.“*

**Craig Johnstone**

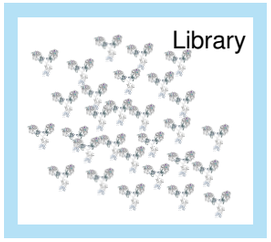
Just
EVOTEC BIOLOGICS

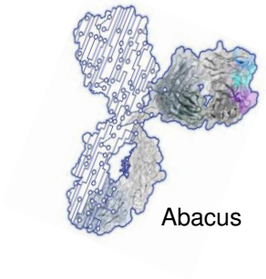
# Taking a systems approach to rapid development of antibodies

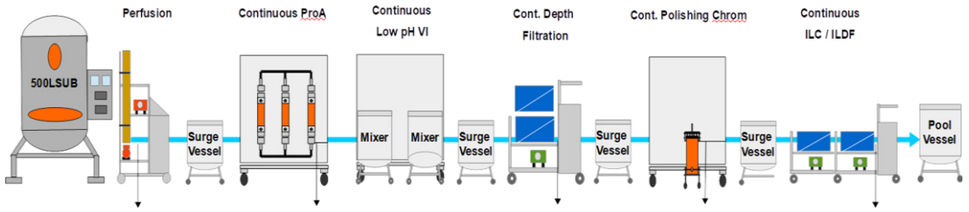
Molecular similarity of antibodies provided the opportunity to standardise methods

Discovery → **High-Speed Autobahn** → Manufacturing network

## J.DESIGN




J.HAL℠ BIOLOGY PREDICTION

J.MD™ MOLECULE DESIGN

J.P3® PROCESS & PRODUCT DESIGN

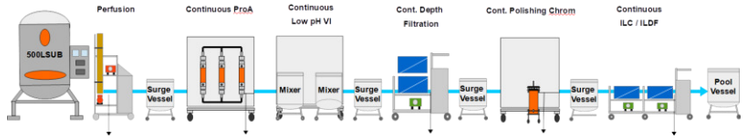
J.POD® CLINICAL & COMMERCIAL MANUFACTURING

# Systems approach creates continuous learning from data

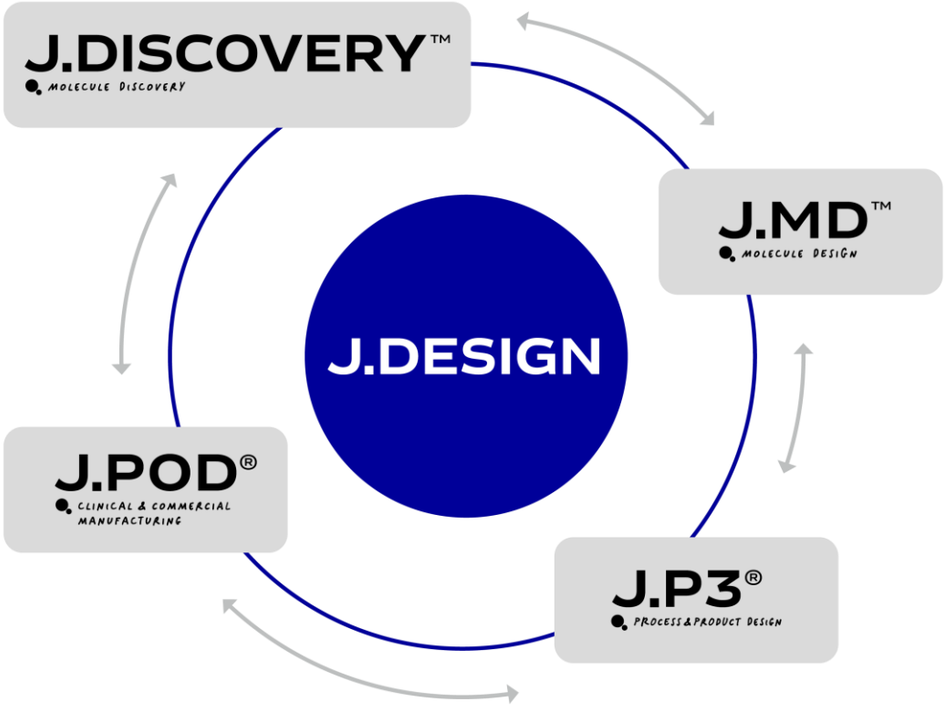
Integrating molecular, process and manufacturing design delivers excellence

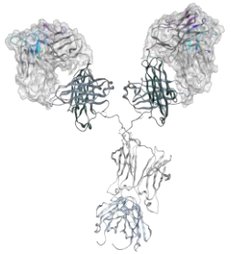
**J.HAL℠** BIOLOGY PREDICTION


AI generated and *in vivo* discovery

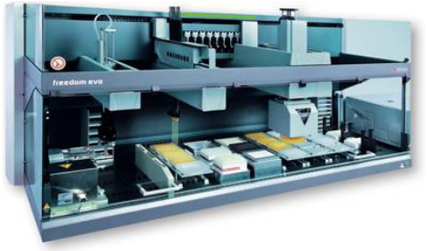




End-to-end continuous processing (E2E)

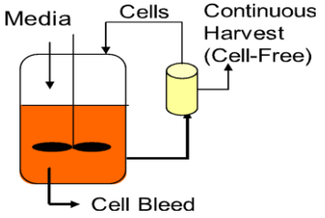


Abacus optimisation to fit process development



Robotic high-throughput process development




Dynamic predictive process control

**Machine learning (ML) and Artificial intelligence (AI) are maturing our integrated biologics platform (J.DESIGN)**

*“Technological innovations are improving biotherapeutic access through cost and timeline reductions.“*

**Dean Pettit**

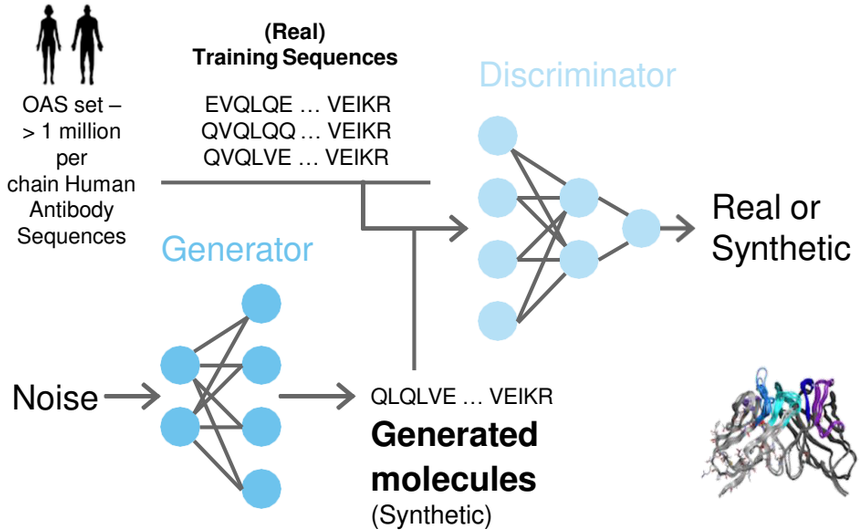
# Generating novel, humanoid antibody sequences with AI/ML

## Overview of J.HAL℠ GAN methodology

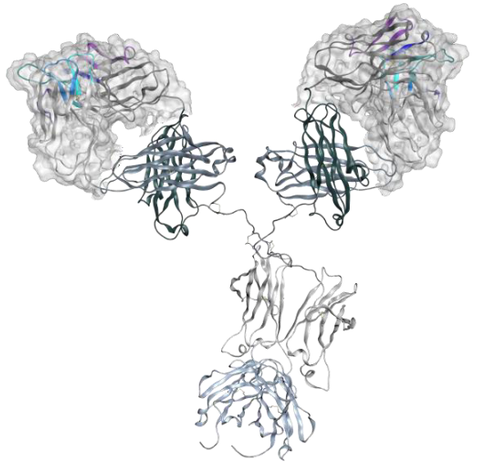
J.DISCOVERY™ MOLECULE DISCOVERY — J.MD™ MOLECULE DESIGN — J.P3® PROCESS & PRODUCT DESIGN — J.POD® CLINICAL & COMMERCIAL MANUFACTURING

### GAN methodology

- **Discriminator** – lightly trained on human antibodies
- **Generator** creates antibody structures, learns from **Discriminator** results
- **Discriminator** is trained further to improve
- Eventually **Generator** produces a diverse library of antibodies indistinguishable from human antibodies




**Humanoid antibody**



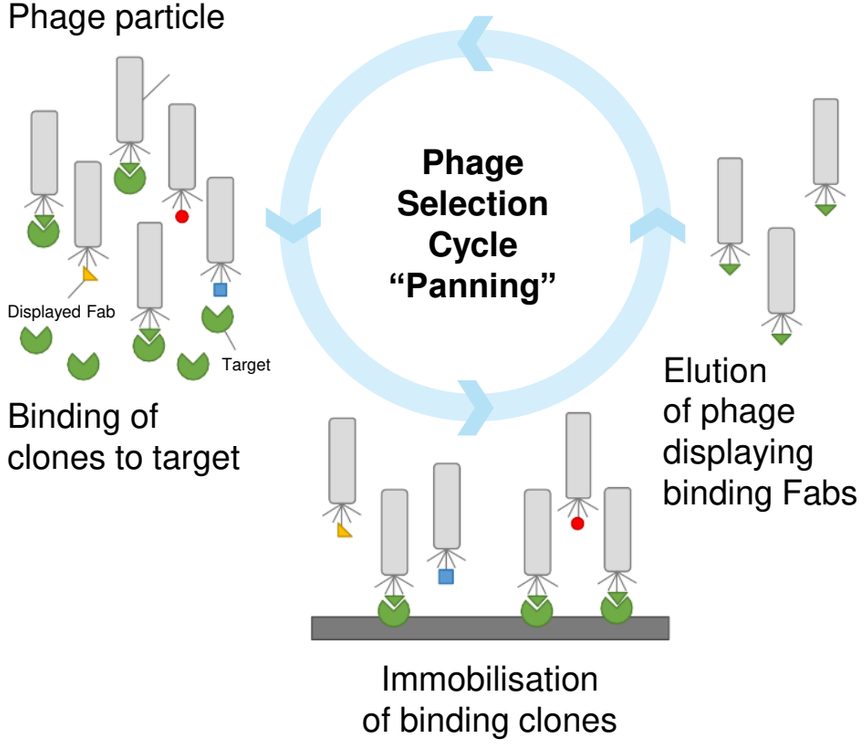
**We can use GAN technology to create humanoid antibodies – ML enables future biasing towards desirable features**

# Case study: Panning for hits on SARS-CoV-2

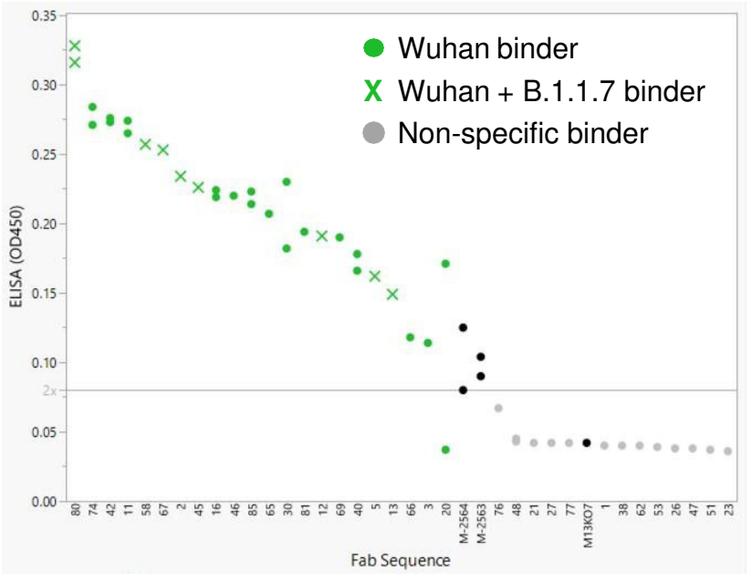
Validation of J.HAL℠ through hit finding on SARS-CoV-2 (Wuhan) and B.1.1.7 (UK) variant

J.HAL℠ Biology Prediction

Phage Library




**SARS-CoV-2 Phage ELISA**



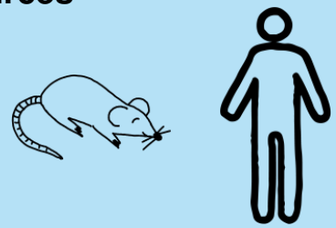

- Three rounds of panning conducted
- 176 clones sequenced
- 35 unique clones identified
- 22 binders to SARS-CoV-2 (Wuhan)
- 8 binders to Wuhan and UK spike variant

# Antibodies from other sources can also be improved by design

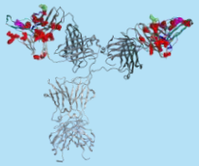
Abacus – an *in silico* computational toolset including ML algorithms

J.DISCOVERY™ MOLECULE DISCOVERY — J.MD™ MOLECULE DESIGN — J.P3® PROCESS & PRODUCT DESIGN — J.POD® CLINICAL & COMMERCIAL MANUFACTURING

## Antibodies from various sources[1)]

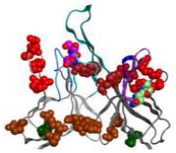


## Input sequence to Abacus

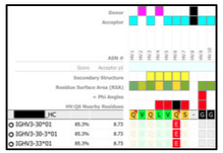


## Abacus

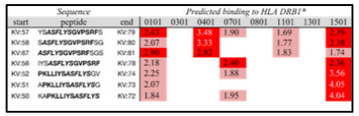
Antibody Fv with hot spots displayed



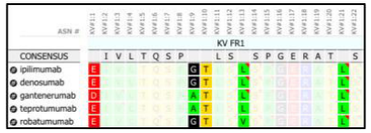

Germline Switching



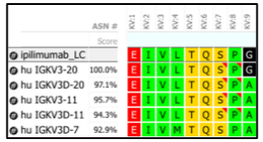
ML Immunogenecity Predictor



Structure-based alignments



Germline Analysis



Hot spot tables

## Molecules optimised for

- Expression in cells
- Purification
- Formulation
- Long-term stability
- & many other features …

**Molecular optimisation builds in quality and speed in execution**



[1)] Evotec receives access to Alloy's ATX-Gx™ mouse platform to enable best-in-class *in vivo* discovery of fully human monoclonal antibodies

# Modelling and intensifying high-yielding, robust processes

Integration of proprietary reagents, robotics, ML modelling and miniaturisation

J.DISCOVERY™ MOLECULE DISCOVERY — J.MD™ MOLECULE DESIGN — J.P3® PROCESS & PRODUCT DESIGN — J.POD® CLINICAL & COMMERCIAL MANUFACTURING

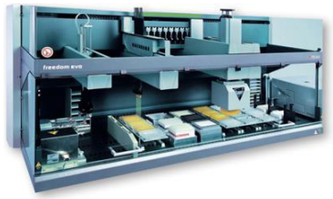
- Powerful expression vectors
- Optimised cell hosts

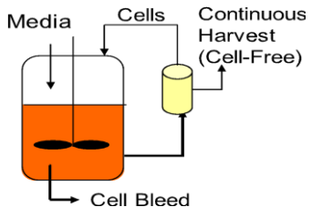
- Custom media tuned for productivity
- High density perfused culture conditions

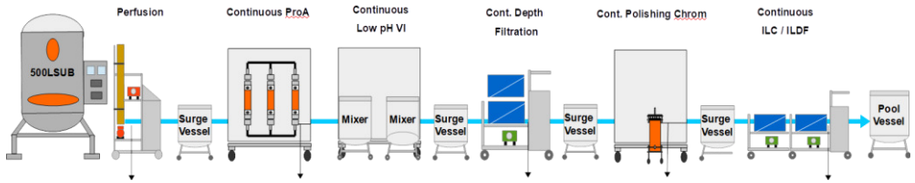
- Connected downstream processing
- High resolution analytical methods

- Highly stable formulation conditions
- Current process yields are generally 2-4 grams per reactor/L per day

**DNA** → **Cells** → **Robotics** → **Scale-down system** → **Full scale manufacturing**





# Disruptive, intensified process in simple modular clean rooms

J.POD® facility design reduces scale-up risk by scaling out, not up

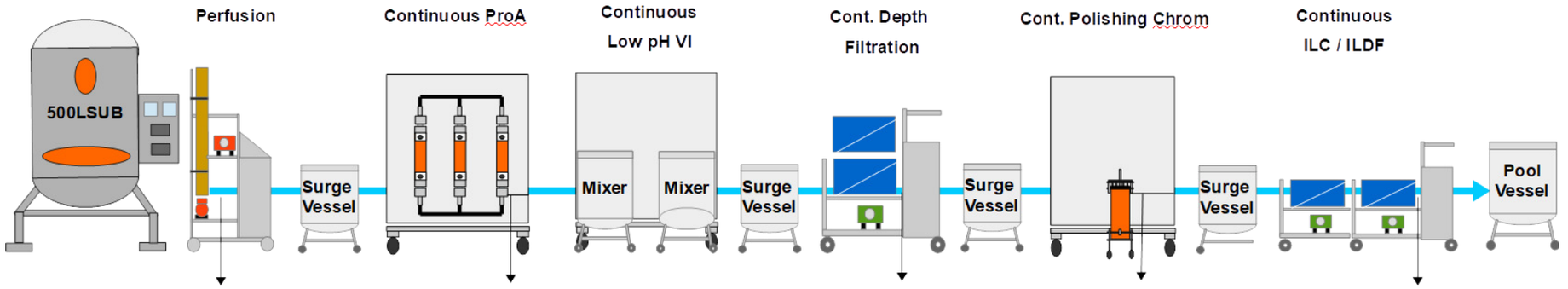
J.DISCOVERY™ — MOLECULE DISCOVERY

J.MD™ — MOLECULE DESIGN

J.P3® — PROCESS & PRODUCT DESIGN

J.POD® — CLINICAL & COMMERCIAL MANUFACTURING

## Intensified processing

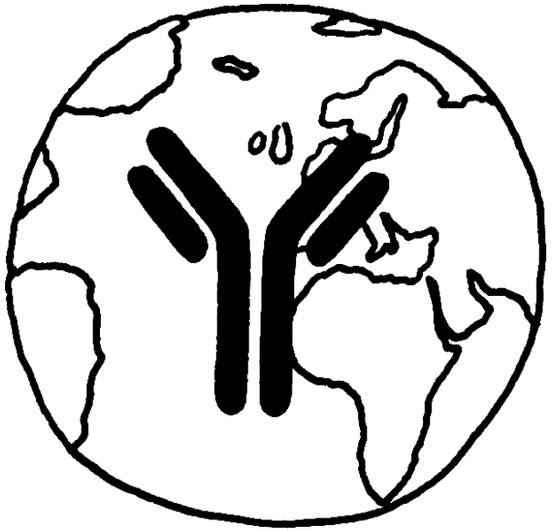



**Production from a few kilograms to metric tons in the same facility**

# The time is now for J.POD® 2 EU …

Rationale for J.POD® 2 EU in Toulouse, France[1)]

- J.POD® 1 US in Redmond is on track and demand is strong, including co-owned pipeline
- Europe is second largest biologics market, anticipated strong desire for local capacity and security of supply
- Toulouse footprint creates operational efficiency and design for multi-modality biological treatments such as cell therapy adds further synergy with EVT strategic needs
- Up to € 50 m from the French government, the Occitanie region, Bpifrance, the Haute-Garonne prefecture as well as Toulouse Métropole



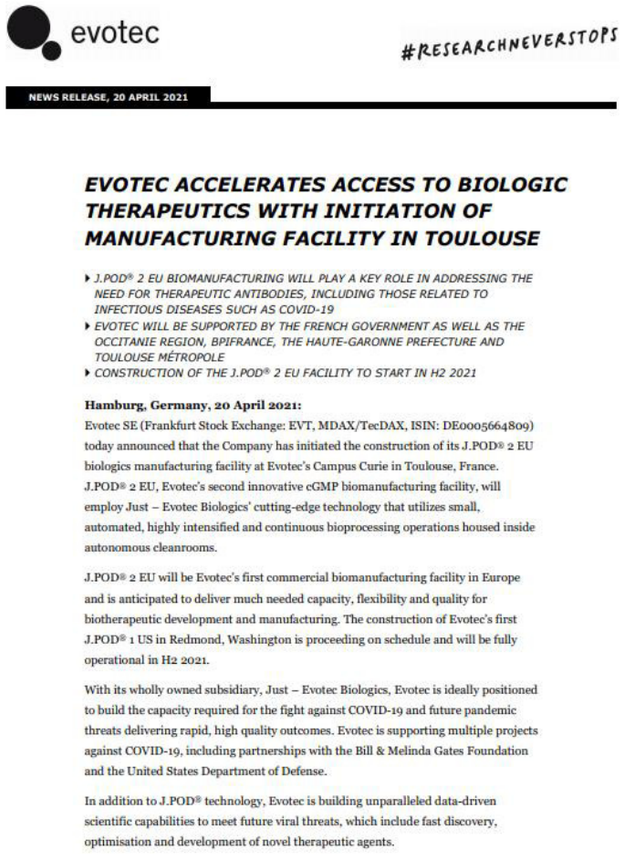


[1)] Subject to local planning, environmental and building regulations and other support and approvals

# Europe's first J.POD® facility at Campus Curie

## Aerial view of Campus Curie

- Suitable 2 ha. green-field site selected (red boxes)[1)]
- North end of existing Evotec Campus Curie, Toulouse, FR
- Design and planning started



evotec #RESEARCHNEVERSTOPS

NEWS RELEASE, 20 APRIL 2021

**EVOTEC ACCELERATES ACCESS TO BIOLOGIC THERAPEUTICS WITH INITIATION OF MANUFACTURING FACILITY IN TOULOUSE**

- *J.POD® 2 EU BIOMANUFACTURING WILL PLAY A KEY ROLE IN ADDRESSING THE NEED FOR THERAPEUTIC ANTIBODIES, INCLUDING THOSE RELATED TO INFECTIOUS DISEASES SUCH AS COVID-19*
- *EVOTEC WILL BE SUPPORTED BY THE FRENCH GOVERNMENT AS WELL AS THE OCCITANIE REGION, BPIFRANCE, THE HAUTE-GARONNE PREFECTURE AND TOULOUSE MÉTROPOLE*
- *CONSTRUCTION OF THE J.POD® 2 EU FACILITY TO START IN H2 2021*

**Hamburg, Germany, 20 April 2021:**
Evotec SE (Frankfurt Stock Exchange: EVT, MDAX/TecDAX, ISIN: DE0005664809) today announced that the Company has initiated the construction of its J.POD® 2 EU biologics manufacturing facility at Evotec's Campus Curie in Toulouse, France. J.POD® 2 EU, Evotec's second innovative cGMP biomanufacturing facility, will employ Just – Evotec Biologics' cutting-edge technology that utilizes small, automated, highly intensified and continuous bioprocessing operations housed inside autonomous cleanrooms.

J.POD® 2 EU will be Evotec's first commercial biomanufacturing facility in Europe and is anticipated to deliver much needed capacity, flexibility and quality for biotherapeutic development and manufacturing. The construction of Evotec's first J.POD® 1 US in Redmond, Washington is proceeding on schedule and will be fully operational in H2 2021.

With its wholly owned subsidiary, Just – Evotec Biologics, Evotec is ideally positioned to build the capacity required for the fight against COVID-19 and future pandemic threats delivering rapid, high quality outcomes. Evotec is supporting multiple projects against COVID-19, including partnerships with the Bill & Melinda Gates Foundation and the United States Department of Defense.

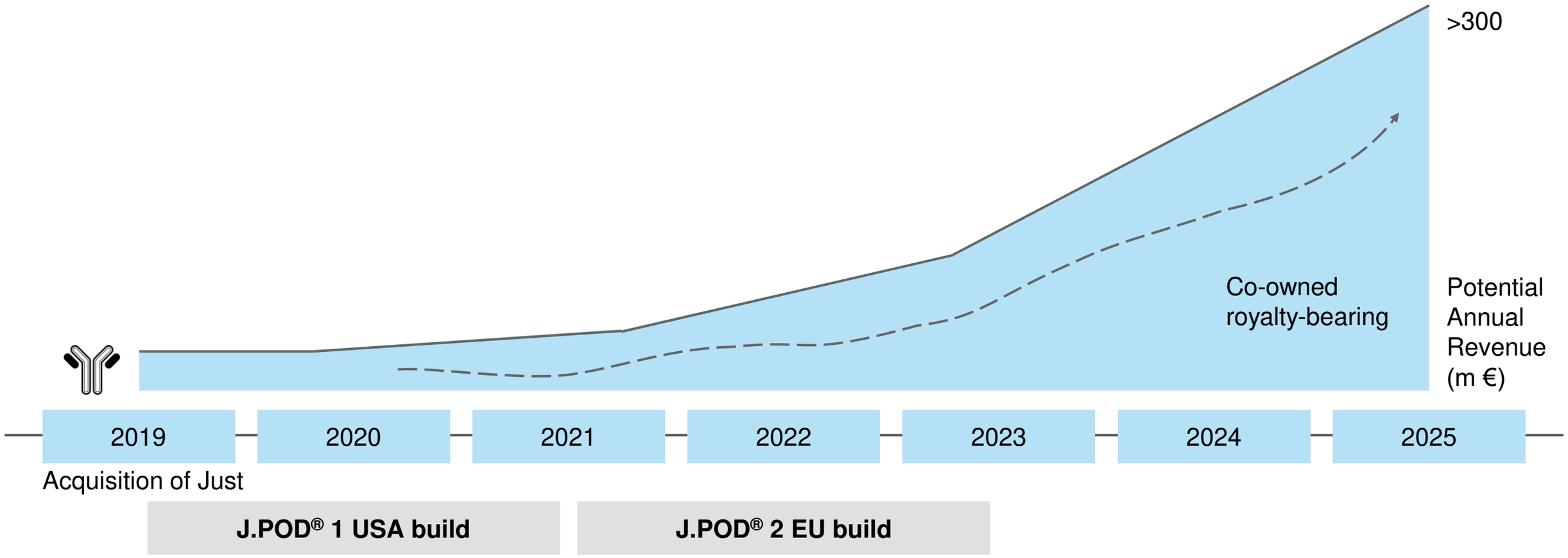
In addition to J.POD® technology, Evotec is building unparalleled data-driven scientific capabilities to meet future viral threats, which include fast discovery, optimisation and development of novel therapeutic agents.



[1)] Subject to local planning, environmental and building regulations and other support and approvals

# Co-owned assets and J.POD® capacity drive future value

Schematic representation of anticipated revenue and co-owned pipeline evolution over time



# The biotherapeutic fast lane on the “Autobahn"

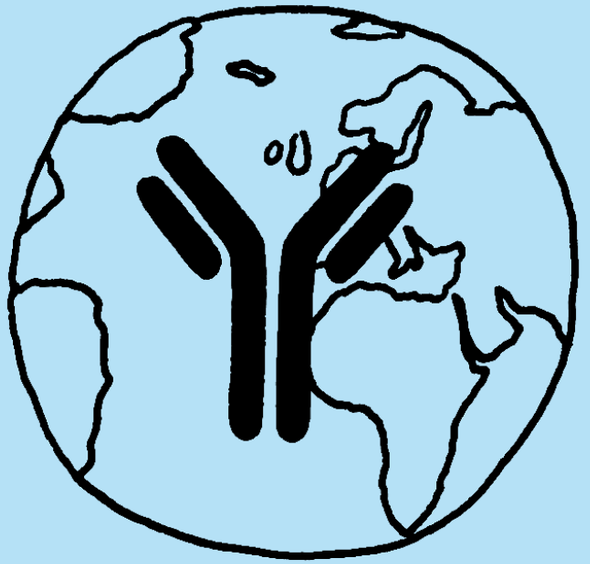
## Summary – From J.HAL℠ to J.POD®

A fast lane of end-to-end integrated offerings –
from Concept to Proof of Concept …

Cutting-edge mAb design technology and discovery capabilities

Expanding capacity of disruptive, intensified, development
and manufacture

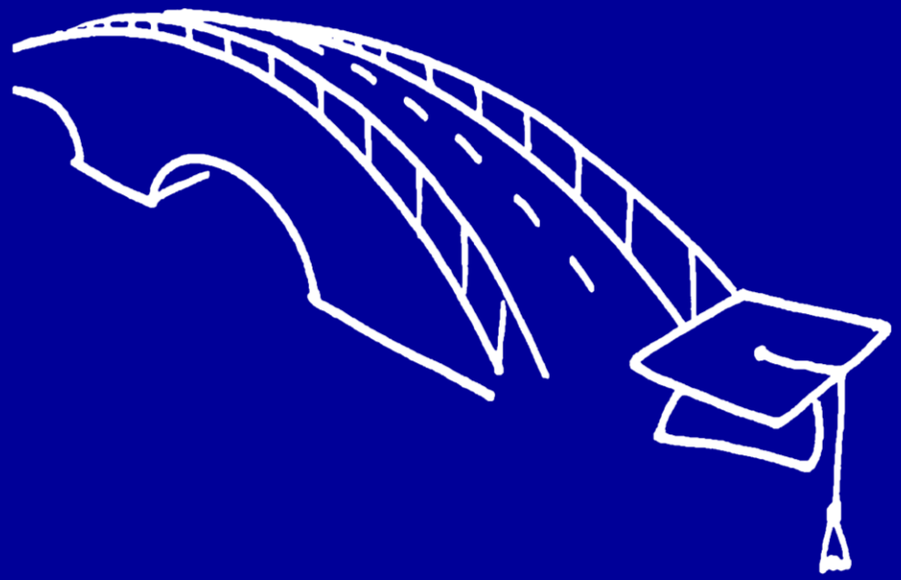
Accelerating our mission to create global access to biotherapeutics



evotec

# BRIDGEs

*Delivering a paradigm-shift in academic translation*



*“BRIDGEs deliver a paradigm-shift in academic translation.“*

**Thomas Hanke**

# Agenda

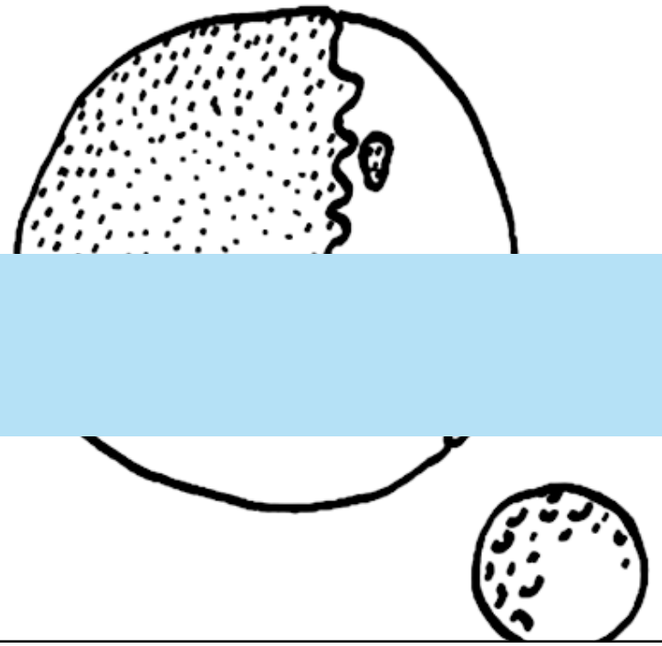
**Action Plan 2025 – The data-driven R&D Autobahn to Cures**
Our business strategy

**Data-driven precision medicine**
iPSC – Witnessing a new paradigm

**From J.HAL℠ to J.POD®**
AI/ML-driven integrated process from discovery to commercial manufacturing of biologics

**BRIDGEs**
From academic translation to patients

**Financials – Guard rails of Action Plan 2025**



# Academia remains key source for novel drugs

Why developing a new paradigm to accelerate academic translation?

**Academia is major source of drug approvals …**

**15-20%**

of approved drugs originate from academia[1)]

**30-40%**

of FDA approved were discovered in European academic labs[2)]

**… but translational efficiency from universities to industry is still poor**

**63%**

of academic Phase III projects successful when collaborating with industry[3)]

**0%**

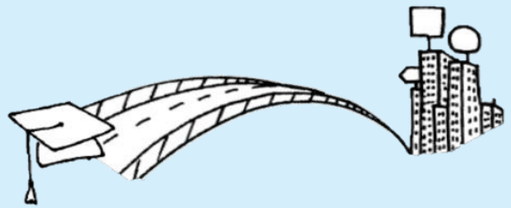
of purely academic projects successful in Phase III or approved[3)]



[1)] Keller, 2010
[2)] F. de Rubertis, Medixci, 2016
[3)] Takebe et al., 2018

# BRIDGEs to accelerate translation are part of Action Plan 2025

Our principles to create investable data sets from university starting points



**Identify the best starting points**
Industry experts to pick the most promising therapeutic concepts ‘among many’

**Validate before investing**
Use Evotec’s technology platform to create robust data sets and overcome the fact that less than 20% of published results cannot be reproduced by pharma[1)]

**Accelerate timelines**
Cut time from academic concept to investable data point by 2-4x

**Enable risk-free company-creation**
Generate investment opportunities for Evotec with ~15% pre-agreed equity[2)]



[1)] Prinz et al., 2011
[2)] Representative pre-money equity stake as of April 2021

# Integrating most relevant expertise to accelerate translation

Value-adding contributions integrated by BRIDGE concept

| Status quo without BRIDGEs | BRIDGE paradigm |
|---|---|
| Scientific idea and early patent application | Differentiated and proprietary starting points |
| Capital used mainly for fix costs | Capital used for variable costs |
| Sporadic involvement | Continuous oversight |
| > 8 years until NewCo investment | < 3 years until NewCo investment |
| < 10% likelihood of seed financing[1)] | > 40% likelihood of seed financing[1)] |



1) Evotec estimates

# New operational framework - BRIDGEs

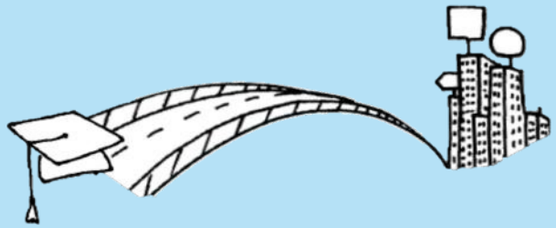
Alignment of strategic objectives and smooth integration of processes required

**Project proposals**

JSC[1)]

**Awarded projects**

**BRIDGE funding**



**Technological and biological validation**

evotec

**NewCo / Acquisition**

**Licensing**

**Pre-agreed rights**

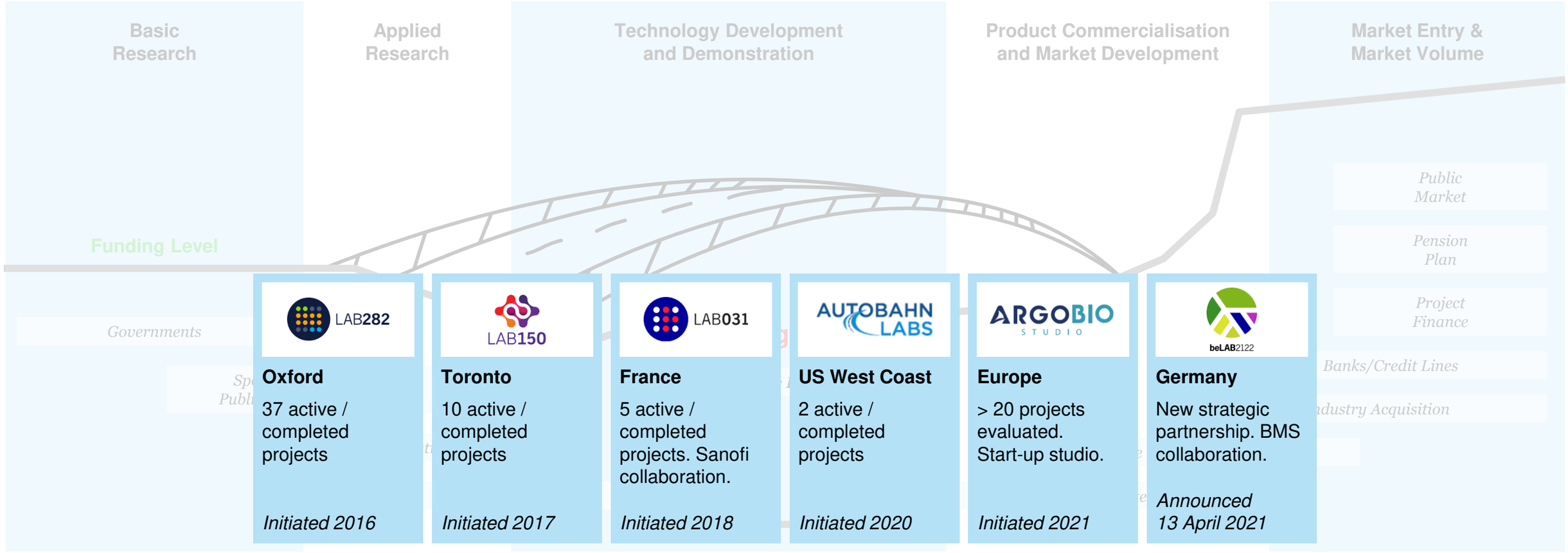
evotec



[1)] Joint Steering Committee

# BRIDGEs produce future multiple investment options

## Creating long-term optionality with efficient translation



# Oxford BRIDGE ‘LAB282’ as blueprint

Collaboration with Oxford University and OSI considered ‘best-in-class’ since 11/2016

Projects:
First-in-class therapeutics

## Stakeholders

Funding:
**£ 17m for 5+ years**

Scouting, Execution & Equity participation

**Status Q1 2021**

**KPI[2] achieved**

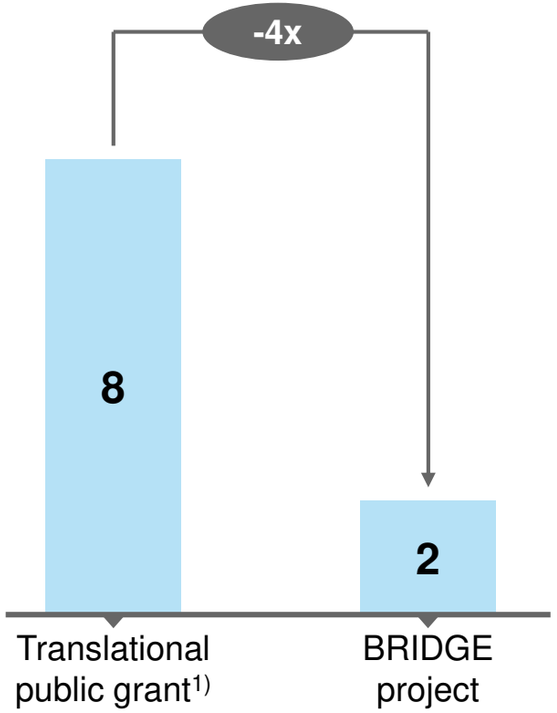



[1] Oxford Sciences Innovation
[2] Key performance indicator

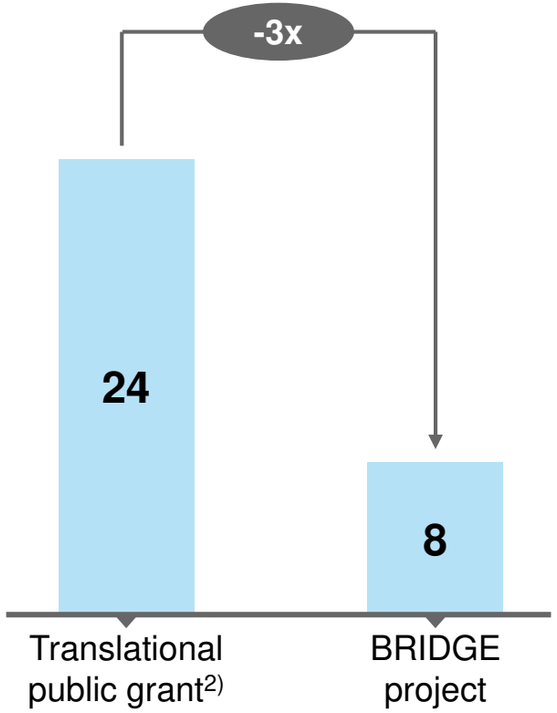
# 2- 4x Acceleration based on only variable costs

## Re-defining translational efficiency: Example LAB**282**

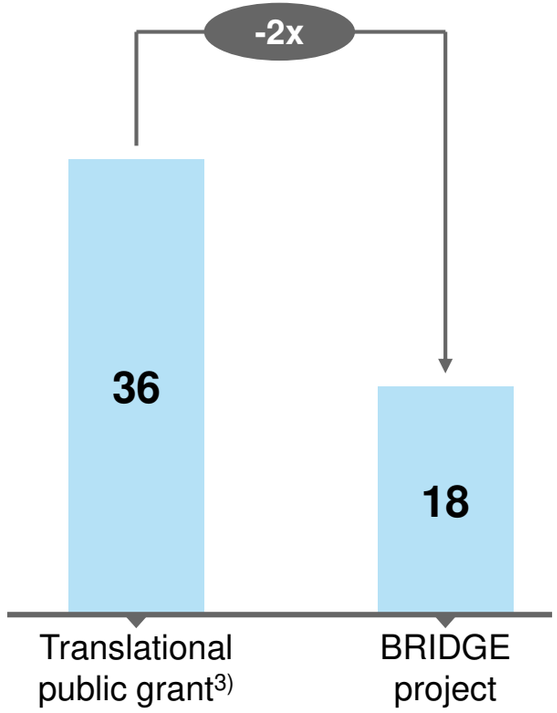
**Average project evaluation time**
(in months before decision)




**Average time until first experiment**
(in weeks after decision)




**Average time until conclusion of experiments** (in months after start)

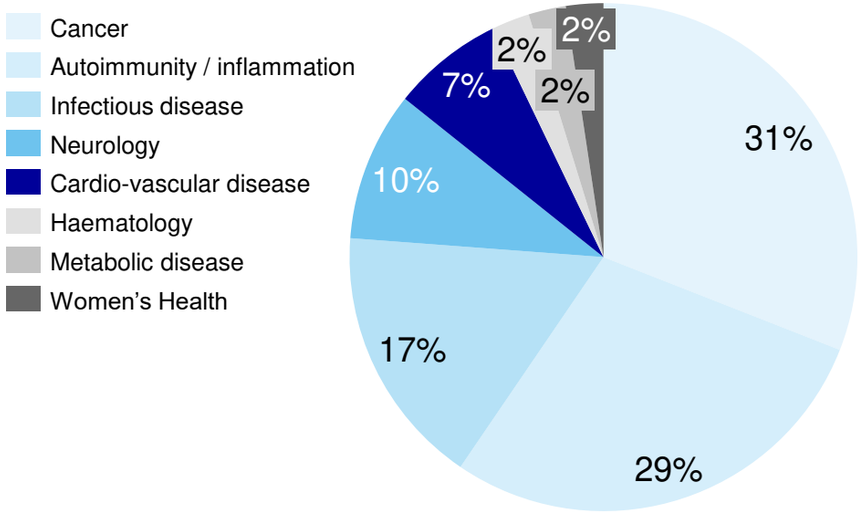


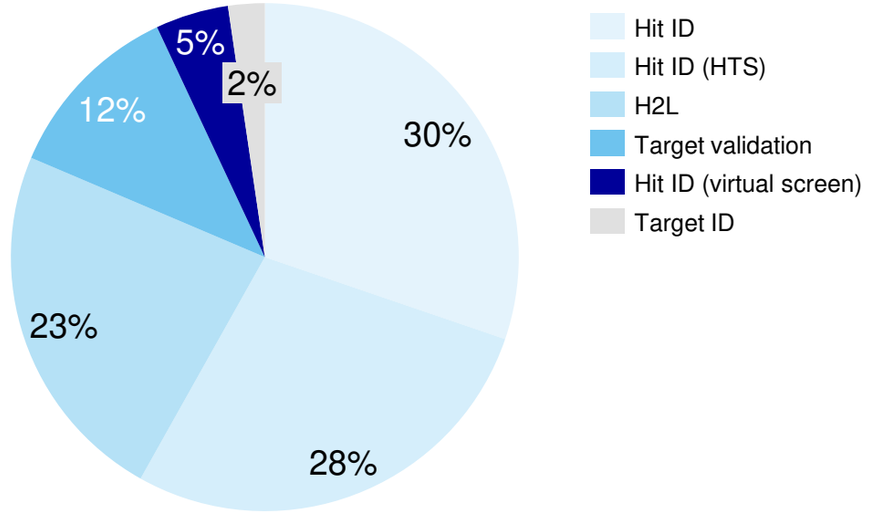



1) Exemplary e.g. for MRC grants (https://mrc.ukri.org/funding/deadlines/)
2) Estimate based on interviews with academic scientists and funders
3) Example: Go-Bio initiative by German BMBF

# Academic starting points fit to our strategy and capabilities

The ‘wide net’ to generate robust data and options



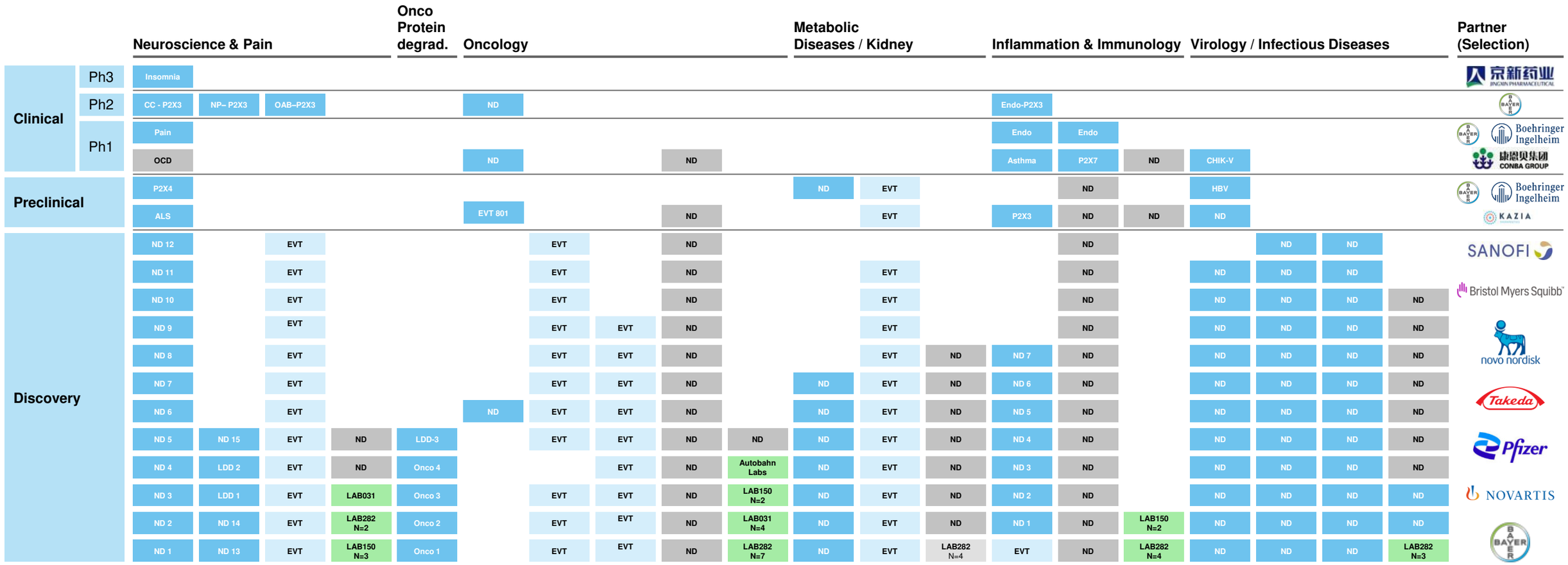

- Validated hit compounds for twelve novel small molecule targets identified by HTS[1)]
- First-in-class antibodies for two novel targets in I&I[2)] identified



[1)] High-throughput screening
[2)] Immunology and inflammation

# BRIDGE contribution to co-owned pipeline just starting

## Projects with big financial upside



# beLAB2122 exemplifies next-generation BRIDGE

Accessing unique cluster of top-tier academic institutions in Germany together with BMS

| | |
|---|---|
| **Academic partner** | German Cancer Research Center (‘DKFZ’), the Goethe University Frankfurt, Heidelberg University and University of Tübingen |
| **Pharma partner** | Bristol Myers Squibb (BMS) |
| **Key commercials** | $ 20 m to advance project portfolio to value-inflection points<br>Co-exclusive option to invest into NewCos upon project completion<br>NewCo equity distribution pre-agreed |
| **Why ‘beLAB2122’?** | BRIDGE encompassing cluster of excellent academic institutions<br>Critical mass of key stakeholders in Rhein-Main-Neckar ecosystem |




2,122 km is the combined lengths of the rivers Rhein, Main and Neckar where the academic partners are located

# First LAB282 company spun out in 2020

Dark Blue Therapeutics developing multiple oncology projects

| | |
|---|---|
| **Objective** | Develop successful LAB**282** oncology projects towards clinical PoC[1)] |
| **Science** | Portfolio of promising single-target small molecule oncology projects<br>(each at H2L stage, exciting biology and sound chemistry based on Evotec screen)<br>Proprietary access to all LAB**282** oncology projects |
| **Academic partner** | The University of Oxford |
| **Structure** | Multi-asset holding company (Dark Blue Therapeutics Ltd) |
| **Investors** | OSI, BMS, Evotec |
| **Status** | First closing in July 2020 |



[1)] Proof-of-concept

# BRIDGE spin-outs will complement current equity portfolio

## Growing portfolio of co-owned opportunities with operational synergies

### At equity investments (share ≥ 20% or significant influence)

| Eternygen | Topas Therapeutics | Exscientia | facio therapies | BREAKPOINT THERAPEUTICS | celmatix | CURE HSYS | QUANTR Therapeutics |
|---|---|---|---|---|---|---|---|
| **Equity participation** | **Spin-off** | **Equity participation** | **Equity participation** | **Spin-off** | **Equity participation** | **Equity participation** | **Equity participation and partnership** |
| Metabolic disorders | Nanoparticle-based therapeutics | AI for automated drug design | FSHD | DNA damage response | Women's health | Cross therapeutic areas | Oncology |
| *Initiated 2016* | *Initiated 2016* | *Initiated 2017* | *Initiated 2017* | *Initiated 2019* | *Initiated 2019* | *Initiated 2019* | *Initiated in 2020* |

### Joint Venture

| NephThera |
|---|
| **Joint Venture with Vifor Pharma** |
| Nephrology |
| *Initiated 2019* |

### Minority Shareholdings (share < 20%)

| Carrick therapeutics | FORGE Therapeutics | FIBROCOR | Aeovian PHARMACEUTICALS | Immunitas THERAPEUTICS | BLACKSMITH Medicines | LEON ENABLING NANO NOW | panCELLa | Cajal Neuroscience |
|---|---|---|---|---|---|---|---|---|
| **Equity participation** | **Equity participation** | **Equity participation** | **Equity participation** | **Equity participation** | **Equity participation** | **Equity participation** | **Equity participation** | **Equity participation** |
| Innovative pathways in oncology | Targeting metalloenzymes | Fibrosis partnership | Inflammatory disease | Oncology / Biologics | Oncology | Formulation nanotechnologies | Failsafe cloaking for cell therapies | Neuroscience |
| *Initiated 2016* | *Initiated 2017* | *Initiated 2017* | *Initiated 2019* | *Initiated 2019* | *Initiated 2019* | *Initiated 2020* | *Initiated 2020* | *Initiated 2020* |

# Global BRIDGE aspiration aligned with Action Plan 2025

Targeted development from 2021 … to 2025

**Active academic partners**
in #

*28* ..... **~50**

**Project proposals reviewed**
in # per annum

*~200* ..... **~400**

**Projects completed**
in total #

*60* ..... **~140**

**Investable data sets created**
in #

*16* ..... **~35**

**Capital invested in projects**
in million €

*35* ..... **~75**

**Companies co-founded**[1)]
in #

*3* ..... **~10**

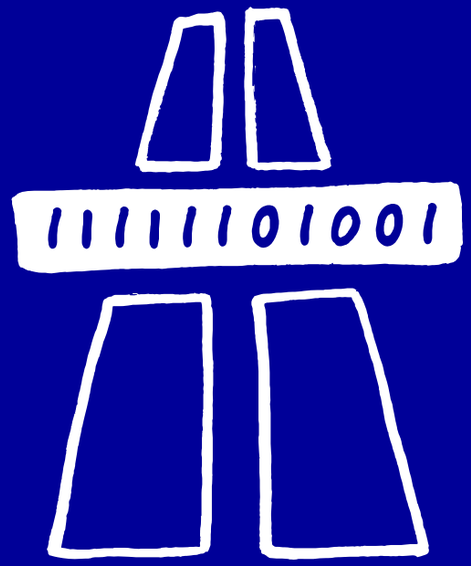


[1)] Incl. Autobahn-Labs and Argobio

evotec

# Financials

*Guard rails of Action Plan 2025*




**ACTION PLAN 2025**

*The data-driven R&D Autobahn to Cures*

*“Taking advantage of low cost of capital will accelerate growth and returns.“*

**Enno Spillner**

# Agenda

**Action Plan 2025 – The data-driven R&D Autobahn to Cures**
Our business strategy

**Data-driven precision medicine**
iPSC – Witnessing a new paradigm

**From J.HAL℠ to J.POD®**
AI/ML-driven integrated process from discovery to commercial manufacturing of biologics

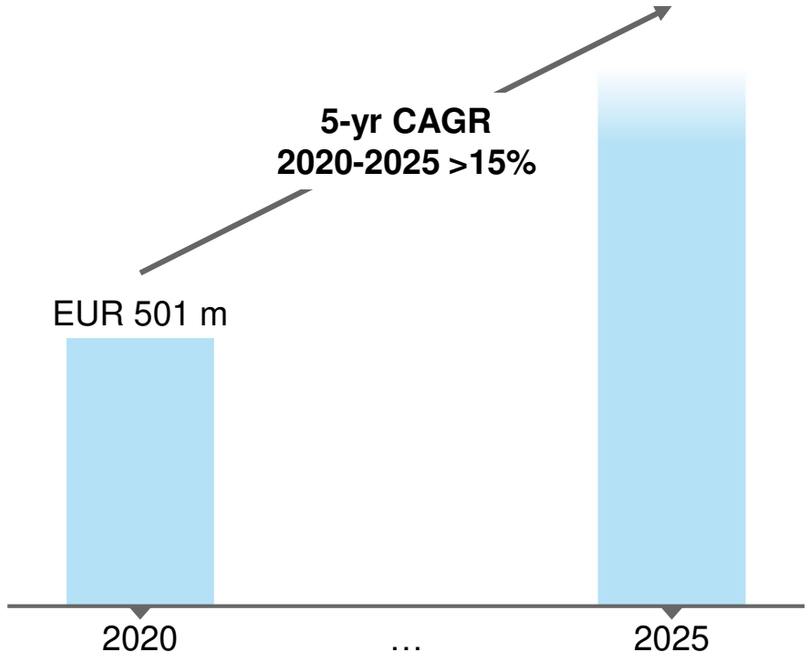
**BRIDGEs**
From academic translation to patients

**Financials – Guard rails of Action Plan 2025**

# Degree of growth depends on co-owning and investment strategy

Goal is to achieve group revenues > EUR 1,000 m by 2025

## Targeted revenue development

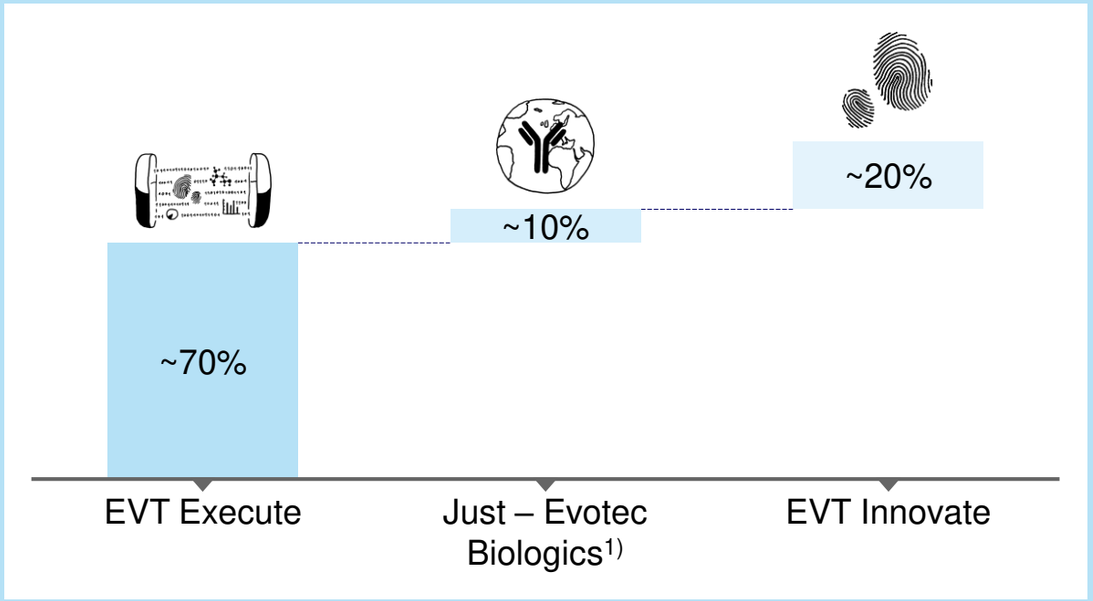



- Overall growth subject to degree of co-ownership
- Just – Evotec Biologics: Goal to reach ~ 30% of group revenues (2020: ~10%)
- EVT Innovate: Target of more than 25% share by 2025 (2020: ~20%), despite noteworthy royalties not being recognised until 2025
- R&D efficiency platforms: Goal of mid to high single-digit growth

# Innovative platforms and commercial manufacturing gain strength

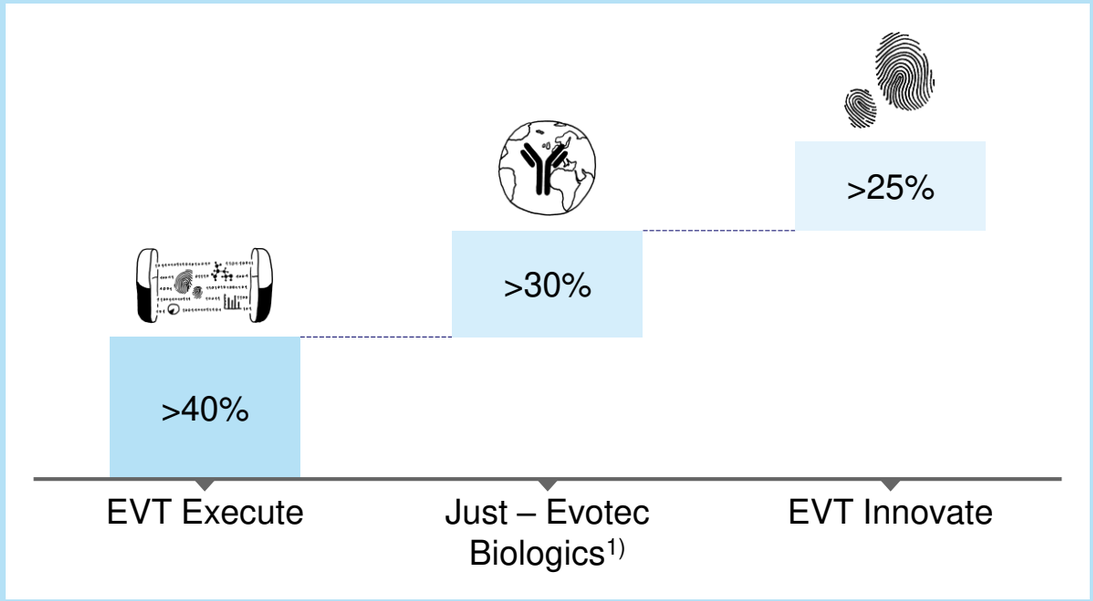
Goal is to achieve a more balanced revenue mix at significantly higher volume by 2025

## Revenue composition 2020




≥2x

## Revenue composition 2025




**Composition of revenue mix expected to change significantly over time while ALL fields continue to grow**

R&D efficiency platforms  EVO*access*  AI/ML & Precision medicine platforms

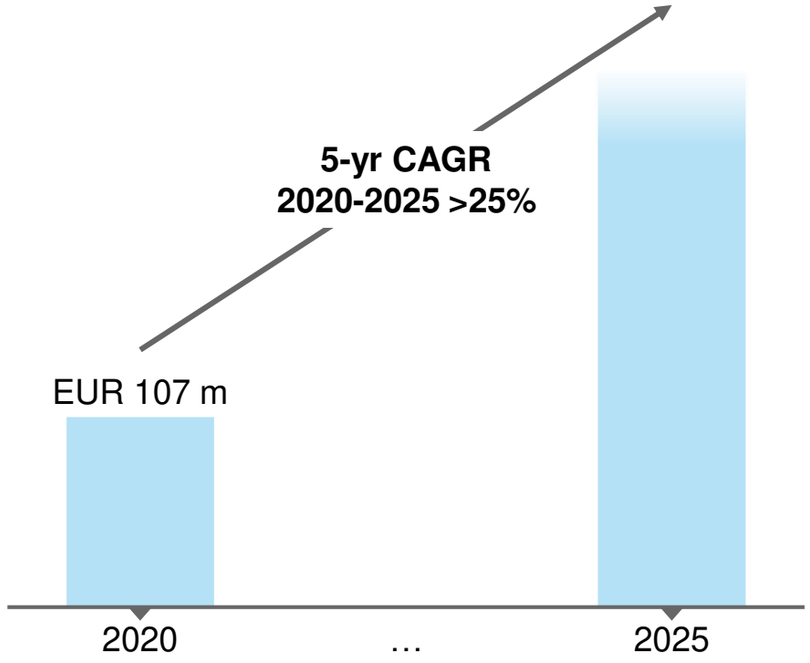


[1)] Just – Evotec Biologics is reporting-wise part of EVT Execute

# Commitment to innovation expected to drive growth & profitability

Targeting adjusted EBITDA ≥ EUR 300 m by 2025

## Targeted adjusted EBITDA development



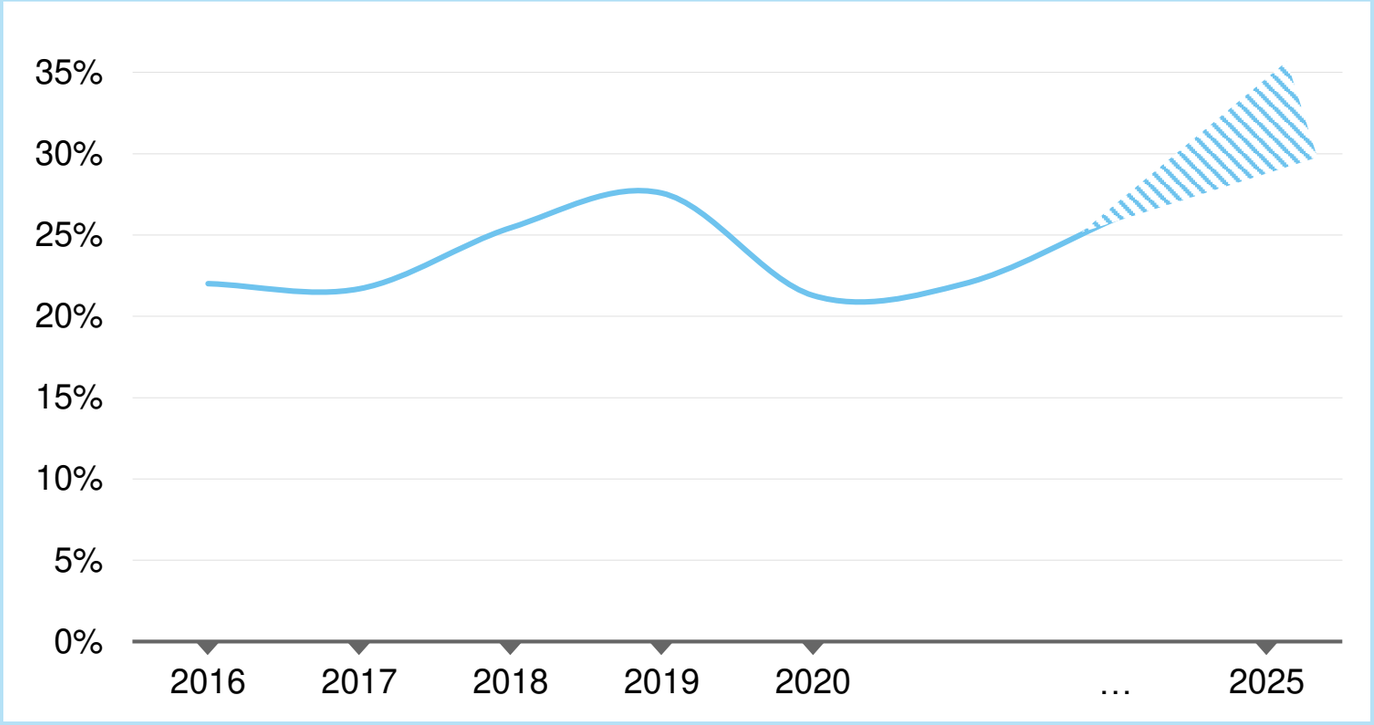

## 5-year adj. EBITDA CAGR 2020-2025 to reach at least 25% due to

- Operating leverage of broader platform and expanded manufacturing capabilities
- Growing breadth and depth of co-owned pipeline leading to increasing contribution from high margin milestones and first royalty income
- Partners getting access to AI/ML & Precision medicine platforms only based on success sharing deals

# Targeted adj. EBITDA margin expansion of at least 800 basis points

Aspiration of sustained adj. EBITDA margin ≥30%

## Targeted adjusted EBITDA margin development



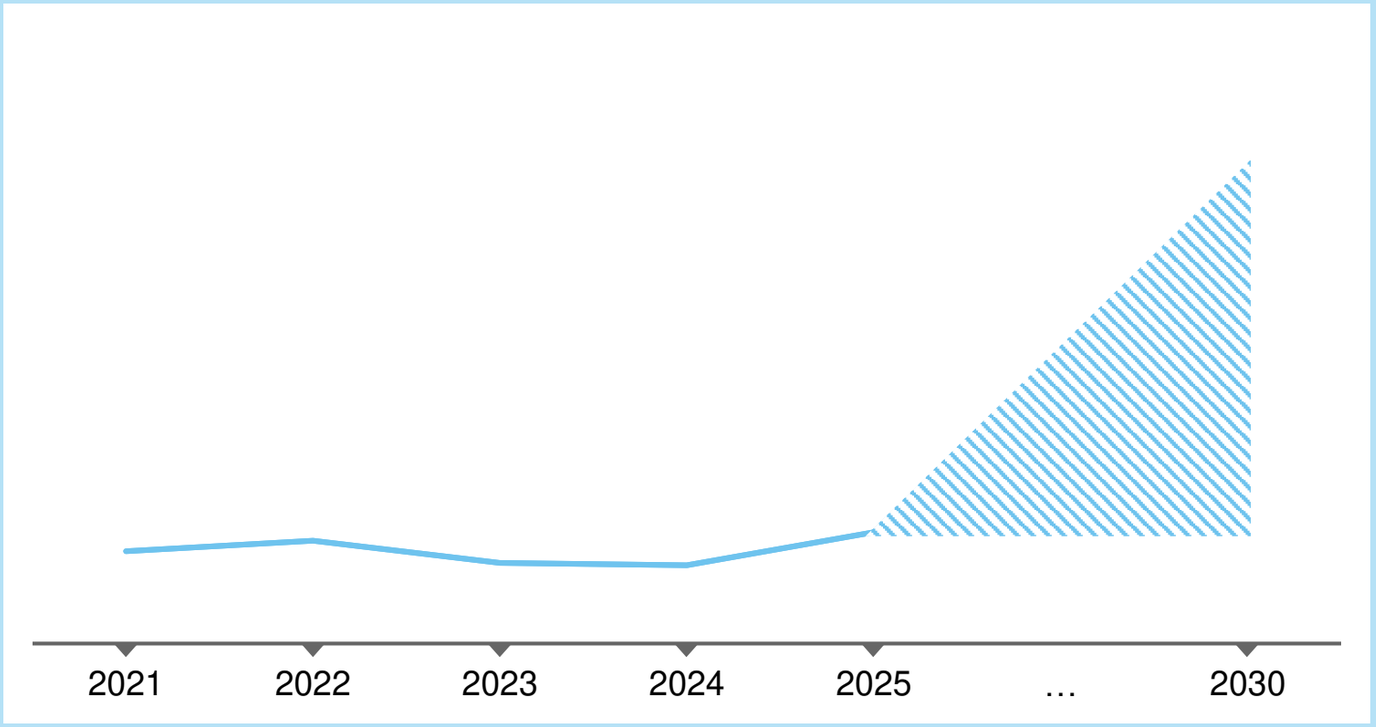

## Anticipated adj. EBITDA drivers:

- Scale to yield further efficiency gains
- Growing share of revenues from manufacturing to translate into improved operating leverage
- Changing business mix with increasing number of projects based on innovative technologies and platforms
- Ultimate margin expansion depends on share of co-ownership projects
- First royalties anticipated by 2025, expected to be moderate

# More to come …

Royalty generation from co-owned assets is "… just at the beginning"

## Potential revenue development of EVO*royalty*

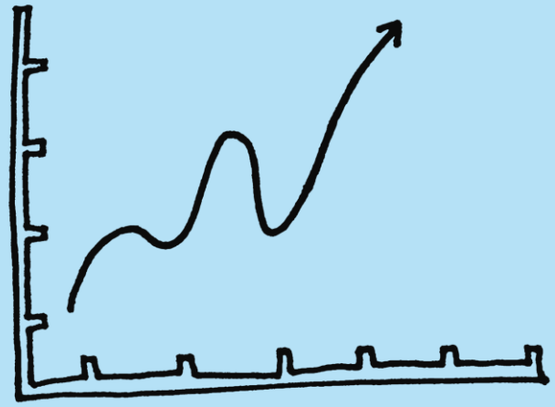



## EVO*royalty* likely to remain at steady state throughout the majority of years covered by AP 2025 …

- … but to make a bigger impact long-term
- First approvals of co-owned assets expected as of 2024/2025 could lead to significant increase of revenues and profitability by 2030
- AP 2025 sets the basis for a highly profitable and sustainable business in the long-run

# Our mid-term aspirations at a glance

2020-2025e Key Performance Indicator goals



**Revenues**
in € m

>100%

500.9 ..... **>1,000**

**Adjusted EBITDA[1)]**
in € m

≥180%

106.6 ..... **≥300**

**Unpartnered R&D**

>100%

47 ..... **>100**

**Co-owned projects[2)]**

>100%

118 ..... **>250**

[1)] before significant royalties
[2)] incl. Equity participations

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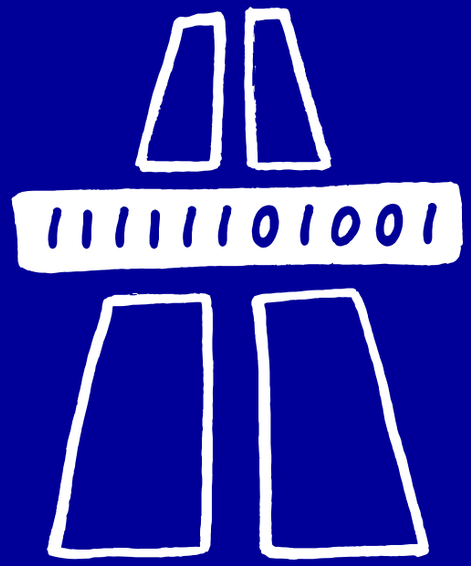
# Summary

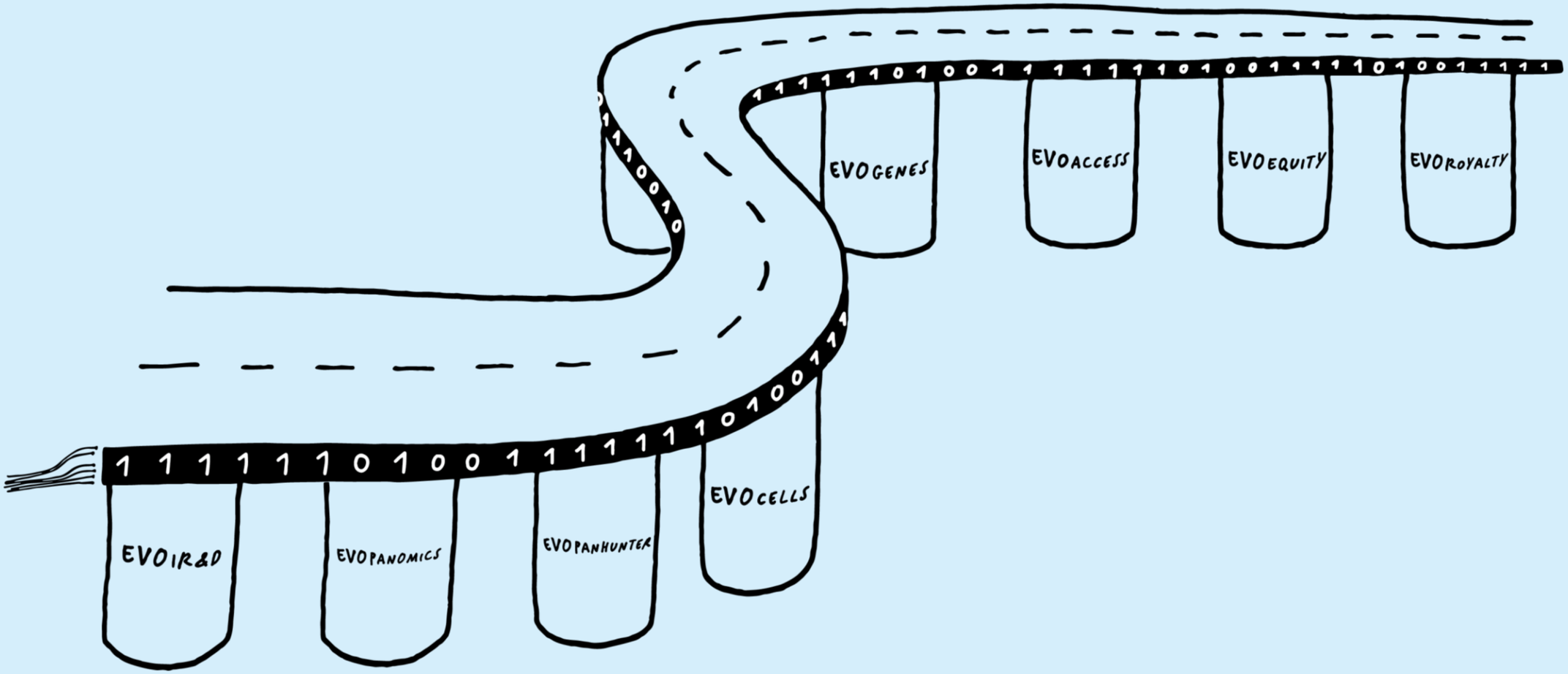



# ACTION PLAN 2025

*The data-driven R&D Autobahn to Cures*

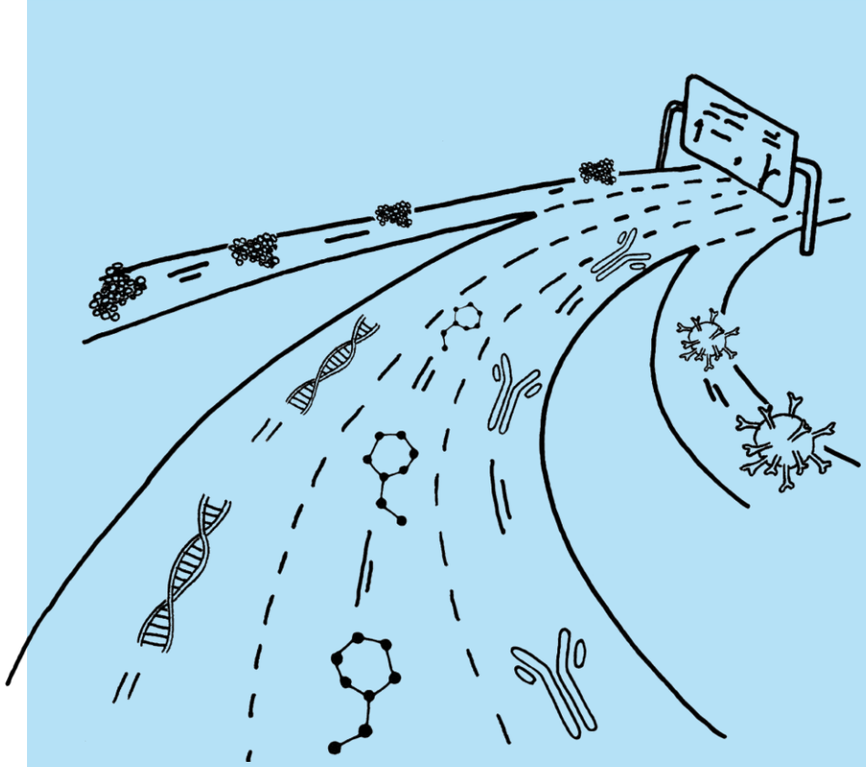
# Please join us on the data-driven R&D Autobahn to Cures

Eight building blocks of the data-driven R&D Autobahn to Cures



# The Innovation hub in discovery & development

## Summary



**Precision medicine is paramount**

- Disease relevance from the beginning will redefine “drug hunting” process – Action Plan 2025 is defining this core principle for its network of partners

**ML & AL will increase R&D IRR**

- Unbiased application of right tools and modalities to novel biology will make drug discovery much more data driven and cost effective
- Access has to be core consideration from start up to manufacturing

**Creating co-owned pipeline is unique strategy that holds massive value**

- Reducing cost of capital via efficient service and sharing partnering processes is helping all parties, and most importantly patients

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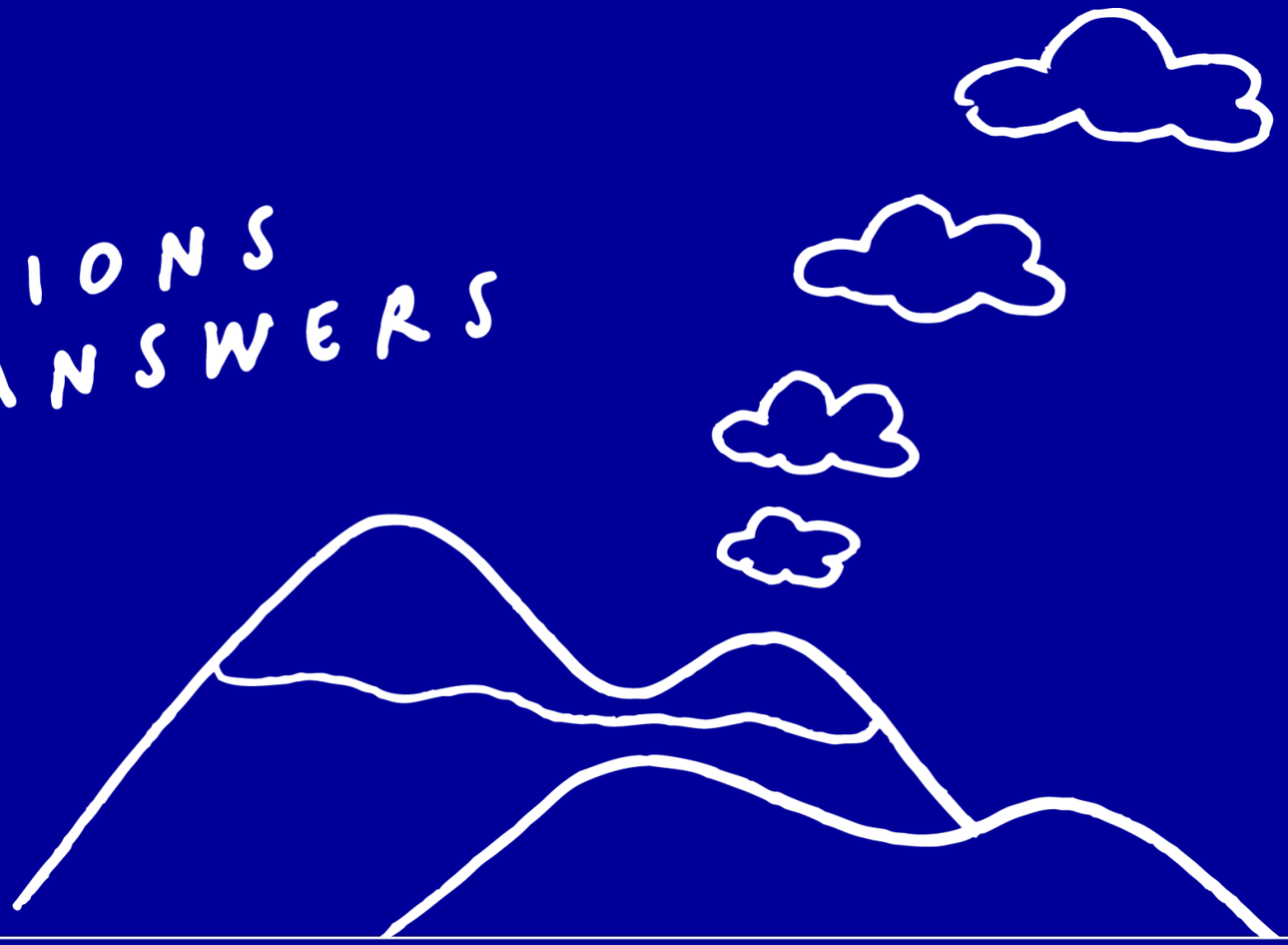
# QUESTIONS AND ANSWERS



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*Many thanks for your participation!*