

absci.

We translate
ideas into drugs.

Corporate Presentation

September 2021



Disclaimers

Forward-Looking Statements

Certain statements in this presentation that are not historical facts are considered forward-looking within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements containing the words “will,” “may,” “anticipates,” “plans,” “believes,” “forecast,” “estimates,” “expects,” “aim,” and “intends,” or similar expressions. We intend these forward-looking statements, including statements regarding our strategy, future operations, future financial position, future revenue, research and development activities, growth plans, projected costs, prospects, plans and objectives of management, to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act and Section 21E of the Securities Exchange Act, and we make this statement for purposes of complying with those safe harbor provisions. These forward-looking statements reflect our current views about our plans, intentions, expectations, strategies, and prospects, which are based on the information currently available to us and on assumptions we have made. We can give no assurance that the plans, intentions, expectations, or strategies will be attained or achieved, and, furthermore, actual results may differ materially from those described in the forward-looking statements and will be affected by a variety of risks and factors that are beyond our control, including, without limitation, risks and uncertainties relating to the development of our technology and our ability to secure milestone payments and royalties; along with those risks set forth in our most recent periodic report filed with the U.S. Securities and Exchange Commission, as well as discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the U.S. Securities and Exchange Commission. Except as required by law, we assume no obligation to update publicly any forward-looking statements, whether as a result of new information, future events, or otherwise.

Market and Statistical Information

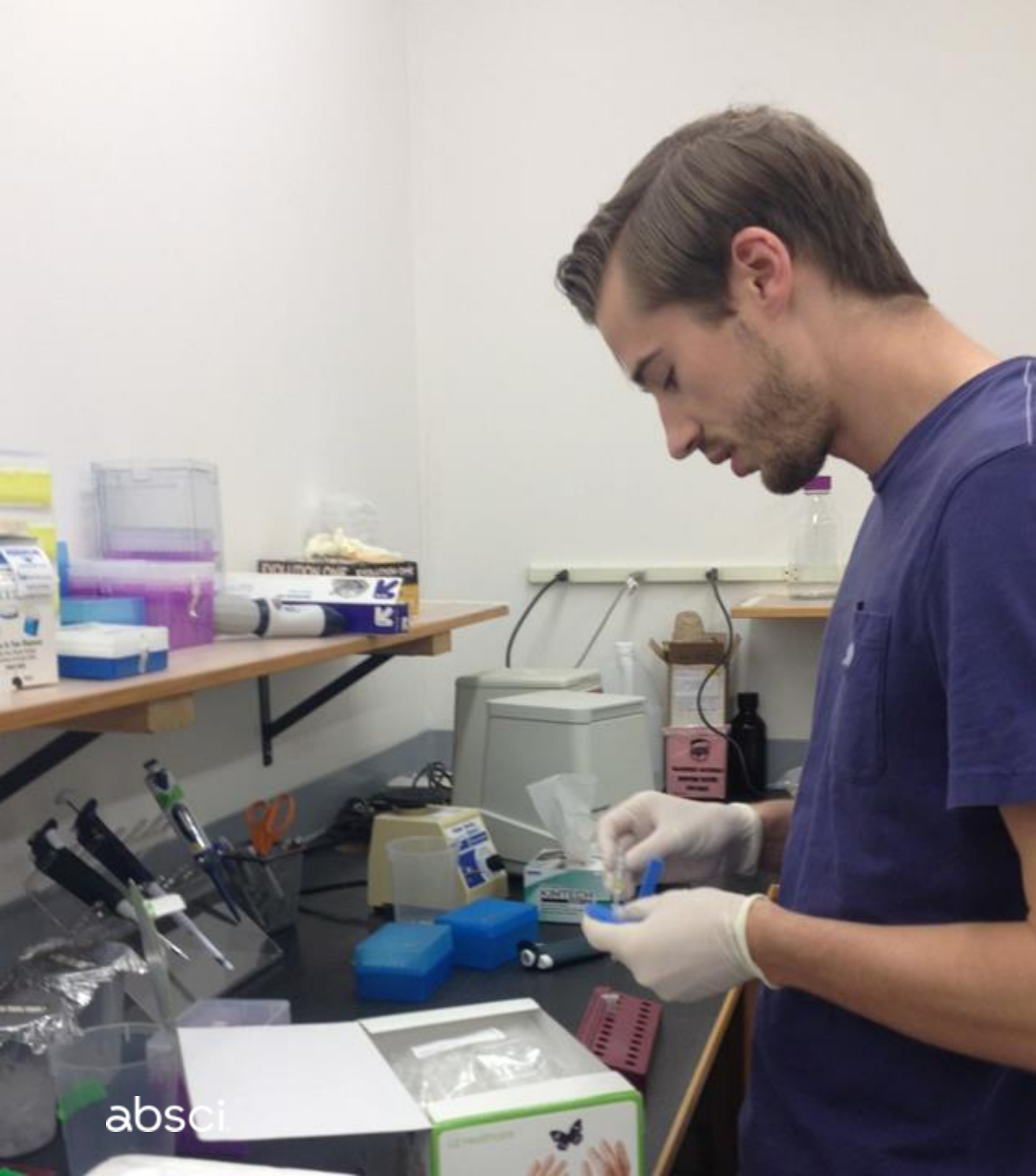
This presentation also contains estimates and other statistical data made by independent parties and by us relating to market size and growth and other industry data. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. We have not independently verified the data generated by independent parties and cannot guarantee their accuracy or completeness.



Absci innovates to create the impossible



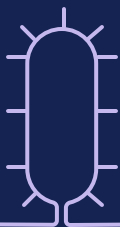
- Integrated Drug Creation™ Platform built on Foundational Technologies
- AI-assisted *de novo* discovery & cell line development...in weeks or months
- Enabling new biologics and modalities, including nsAAs, and potential COGs savings
- \$254B 2020 sales in protein-based therapeutics, expected growth to \$418B in 2026
- Next-gen biologics represent ~32% of protein-based biologics in Phase 1
- Differentiated business model: share in partners' successes with milestones & royalties
- 9 Active Programs* for preclinical or clinical molecules with potential for downstream economics
- ~200 people
- New 77,000 ft² campus
- July 2021 IPO; \$230M gross proceeds; Nasdaq: ABSI



Revolution...

reimagining how
biologic drugs
are made

A better, faster path to new biologic drugs



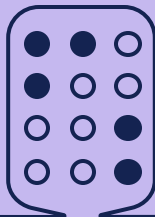
SoluPro® & Bionic SoluPro®

Patented *E. coli* cell lines bioengineered for production of mammalian proteins and proteins incorporating nsAAs



Folding & Expression Solutions

Curated collection of modular genetic elements to customize SoluPro® strains for optimal production of any given protein



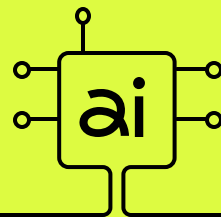
Breakthrough Assays

Proprietary high-throughput techniques for screening billions of single cells for target binding affinity, quality, and titer of protein-of-interest




Custom Scaffold Libraries

Custom libraries of sequence variants created for any desired scaffold architecture, whether naturally-occurring, pre-existing, or newly imagined



Denovium Engine™

Deep learning AI models of protein function and manufacturability harnessing large assay datasets to inform future designs *in silico*



Computational Antibody & Target Discovery

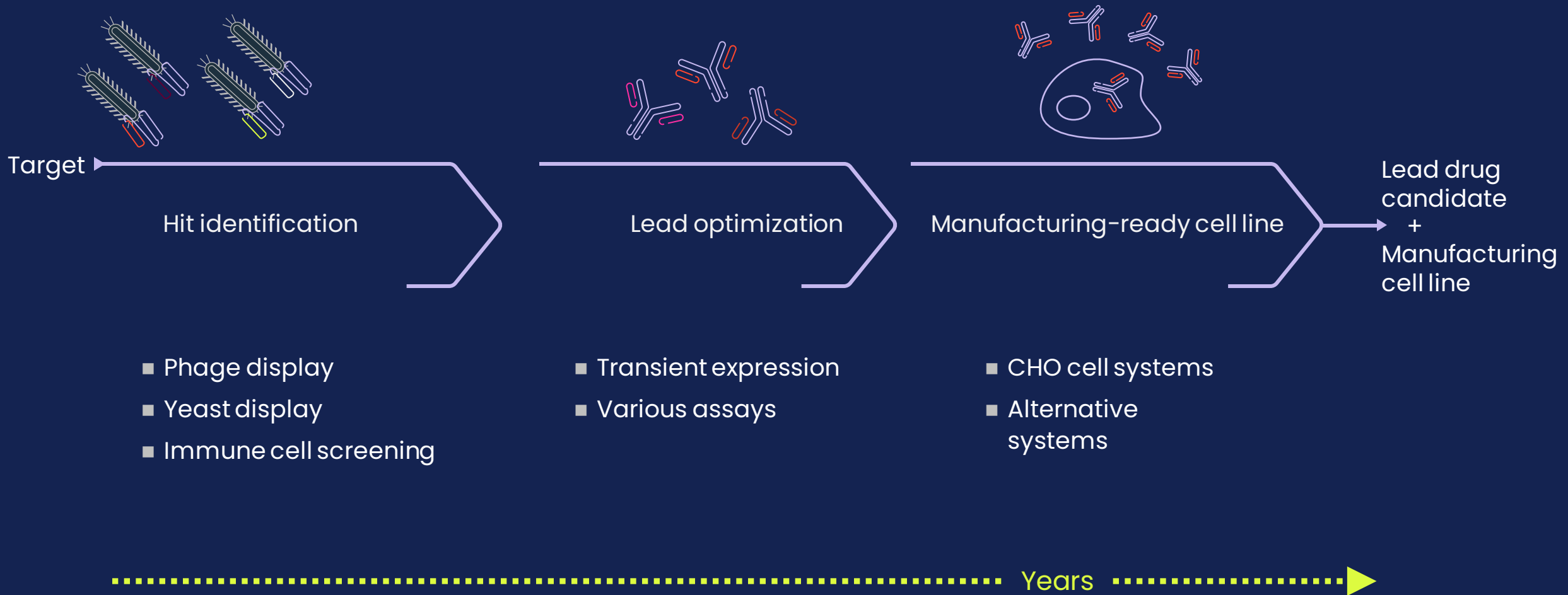
Bioinformatics technology for reconstructing human antibody sequences from tissue RNA, and identifying corresponding antigens as potential drug targets

Better medicines

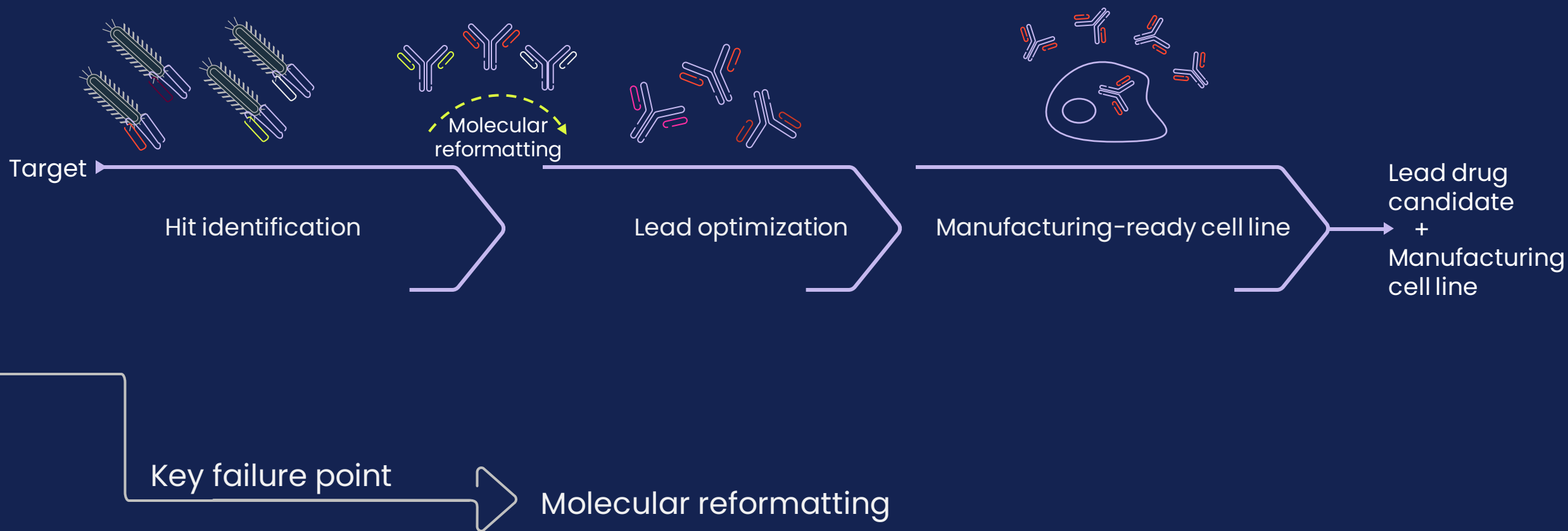
How?



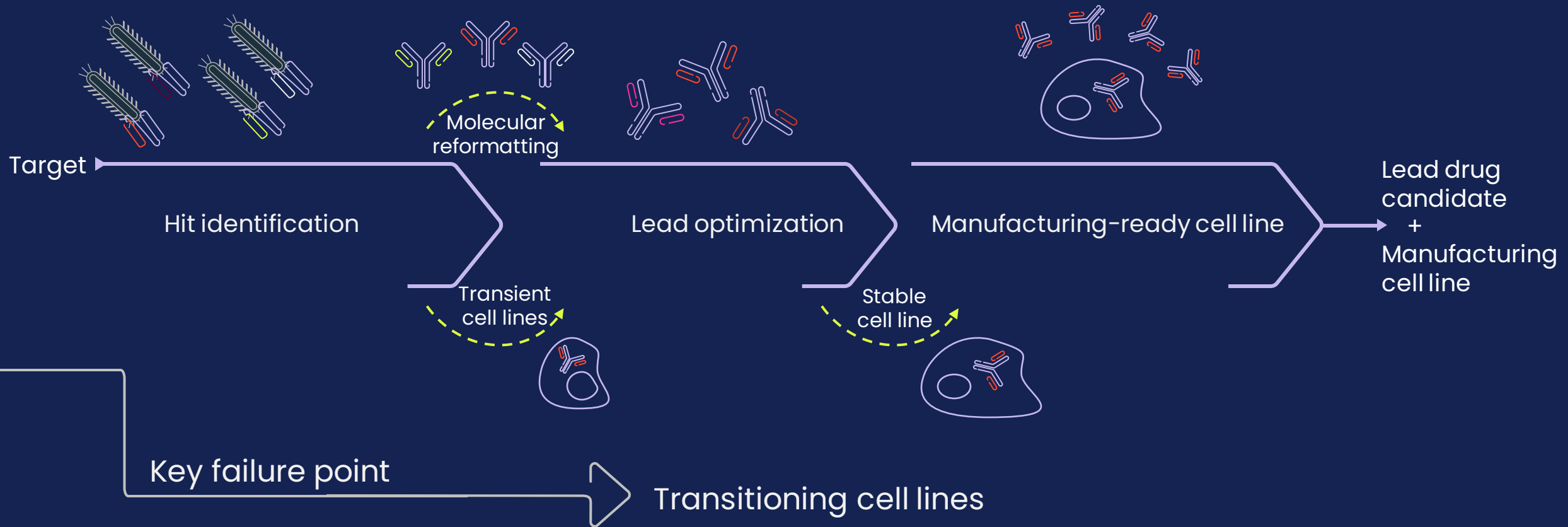
Conventional biopharma discovery & development



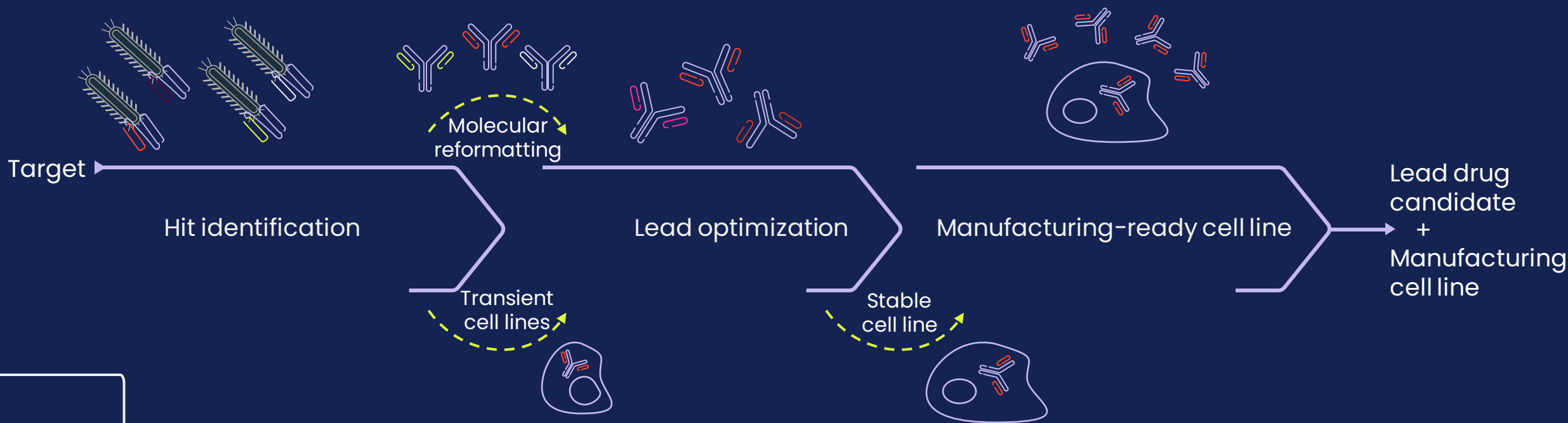
Conventional biopharma discovery & development



Conventional biopharma discovery & development



Conventional biopharma discovery & development



Current challenges

Lengthy timelines

5.5

Years from discovery to IND

High failure rates

2/3

Lead drugs that never advance to clinical trials

Limited modalities



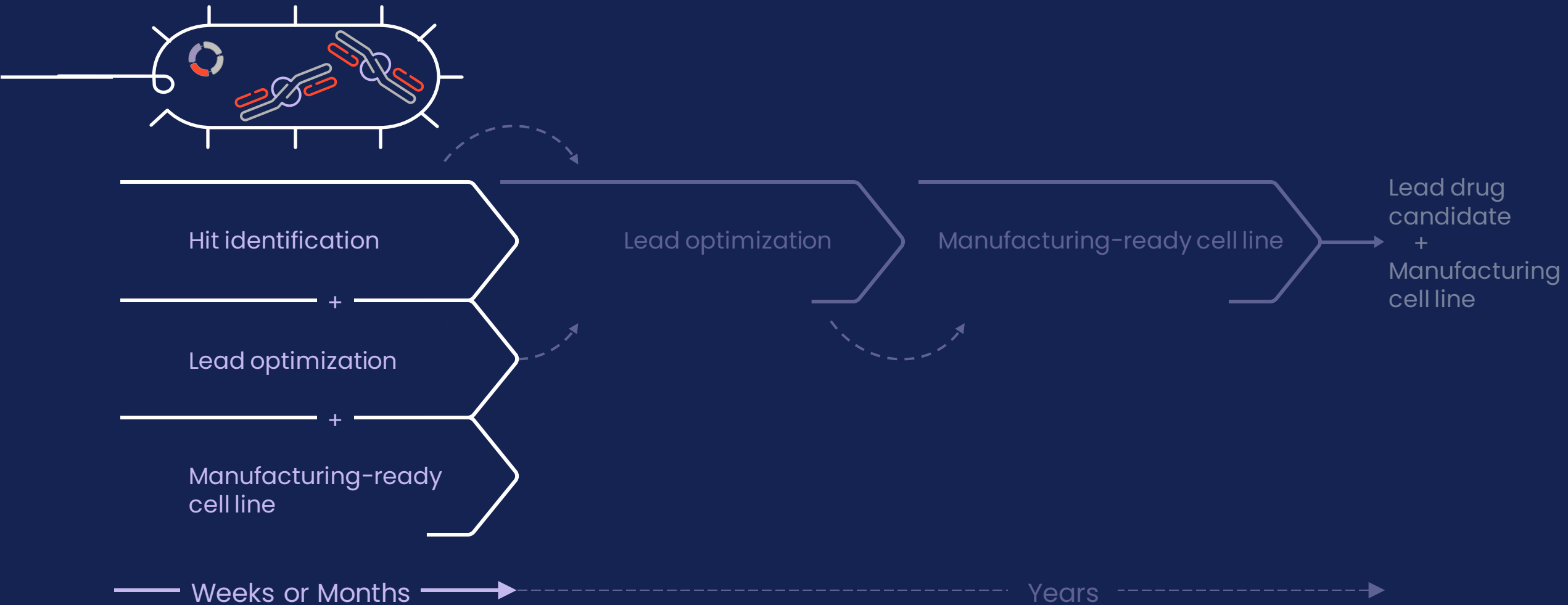
mAb discovery methods may not be adaptable to next-gen scaffolds



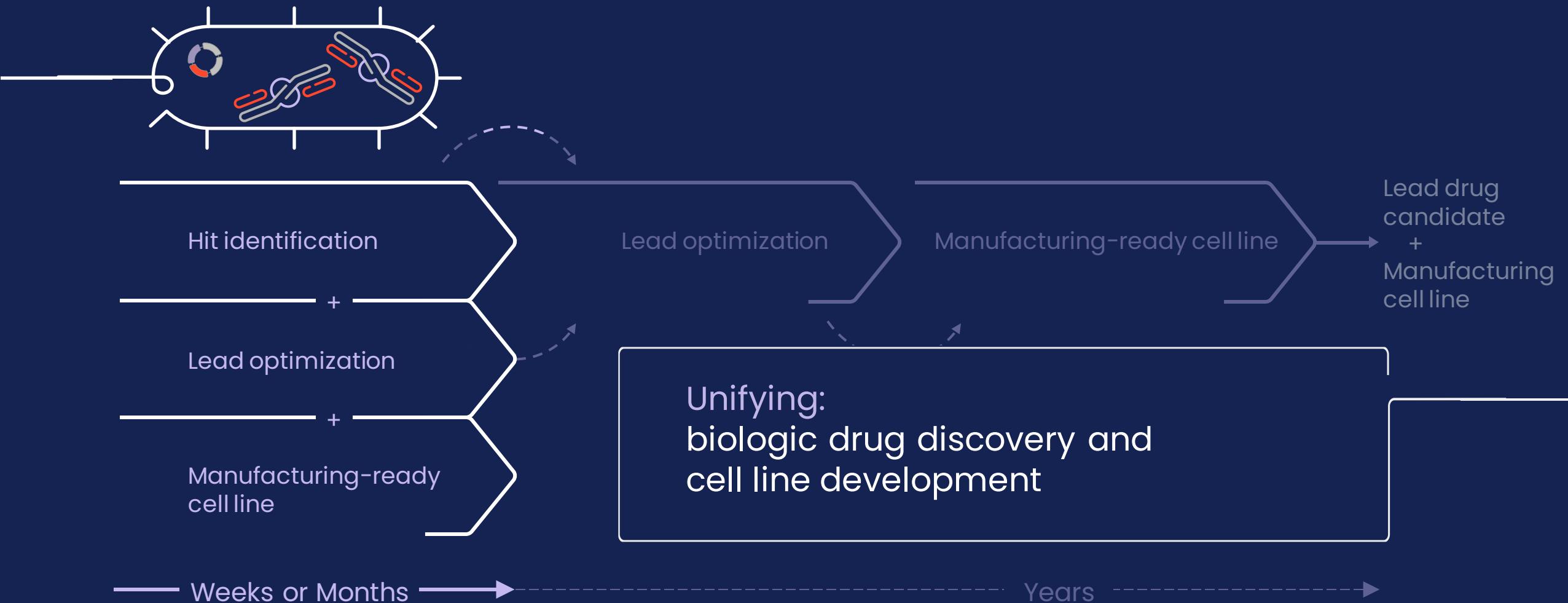
What if

You could create any drug
you can imagine?

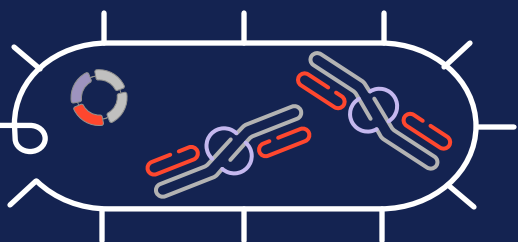
Revolutionary new approach: Integrated Drug Creation™



Revolutionary new approach: Integrated Drug Creation™



Integrated Drug Creation™: adaptable to any modality



Hit identification

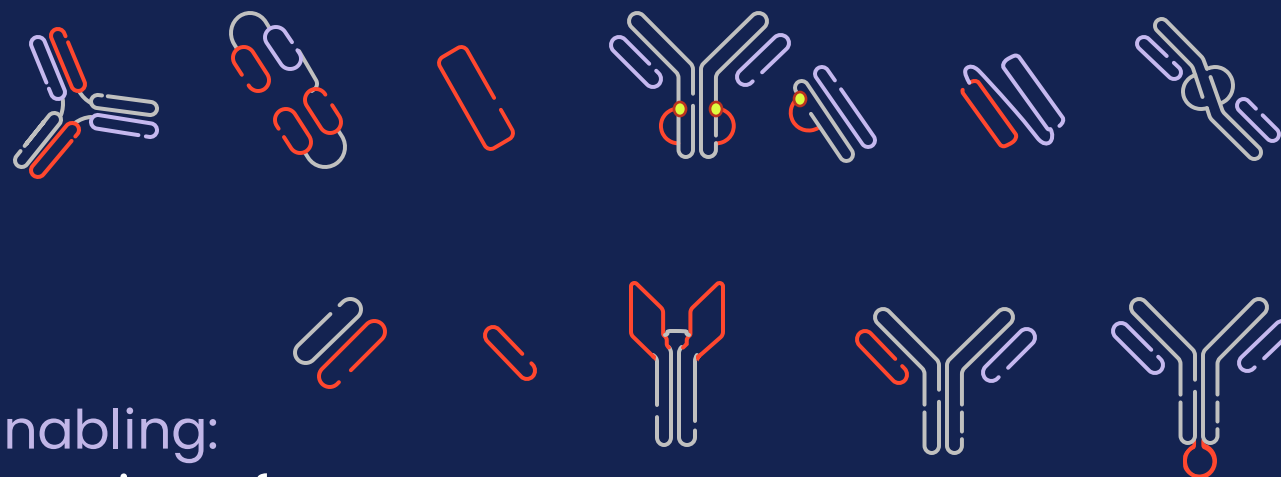
+

Lead optimization

+

Manufacturing-ready
cell line

Weeks or Months →



Enabling:
creation of new-to-nature
scaffolds and modalities

Merging technologies

AI + synthetic biology +
biopharma

Differentiated platform across technology categories

Synthetic Biology

Other industries

Ginkgo Bioworks
Zymergen
Geltor
Bolt Threads

Biopharma

absci.

Proteins

absci.

Generate Biomedicines

Small molecules

Recursion Atomwise
Relay Valo Health
Insitro Exscientia
Schroedinger

Biologic Drug Discovery

Antibodies

Abcellera
Adimab
Alloy Therapeutics

Next-gen biologics

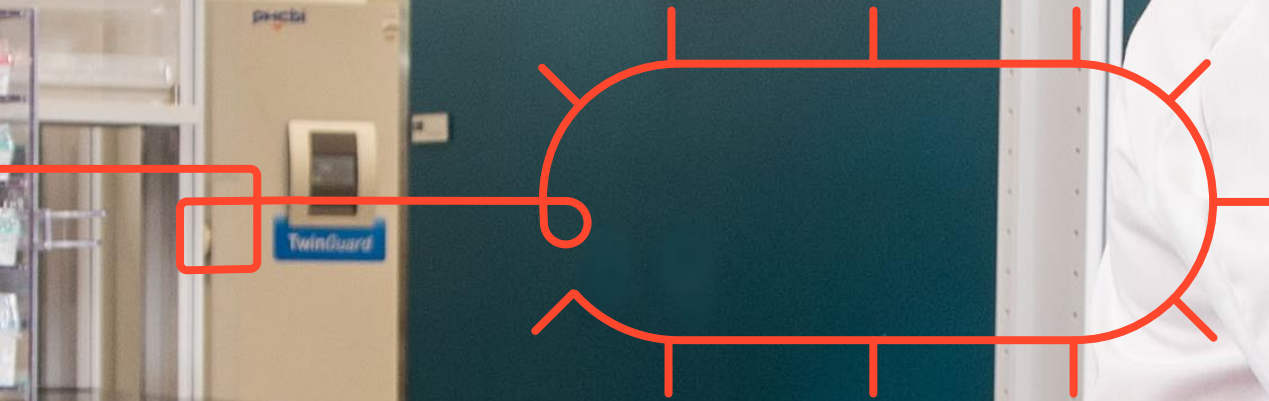
absci.

AI Enabled Drug Discovery

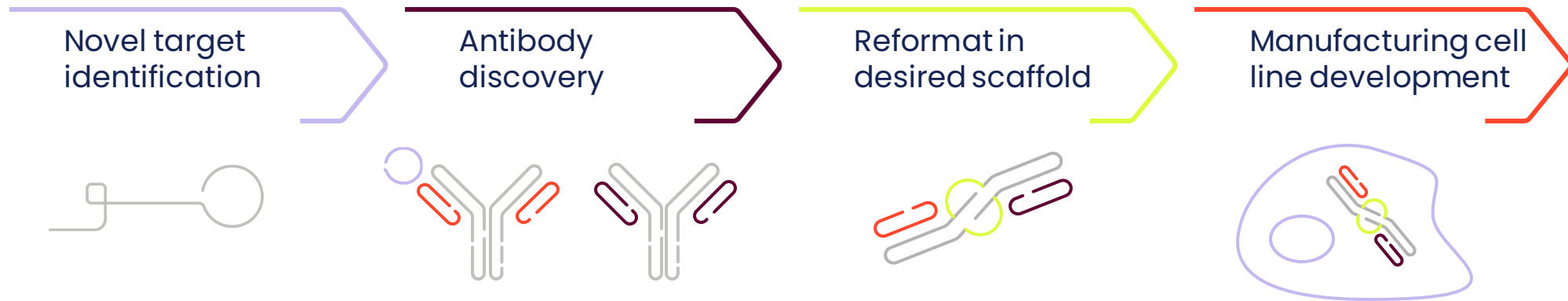
absci. SoluPro® production cell line with every program

The end-game

Protein-based drug
discovery
the way it should be



Assembling technologies for next-gen drug discovery



Integrated Drug Creation™ Platform – *designed* for next-gen drug discovery

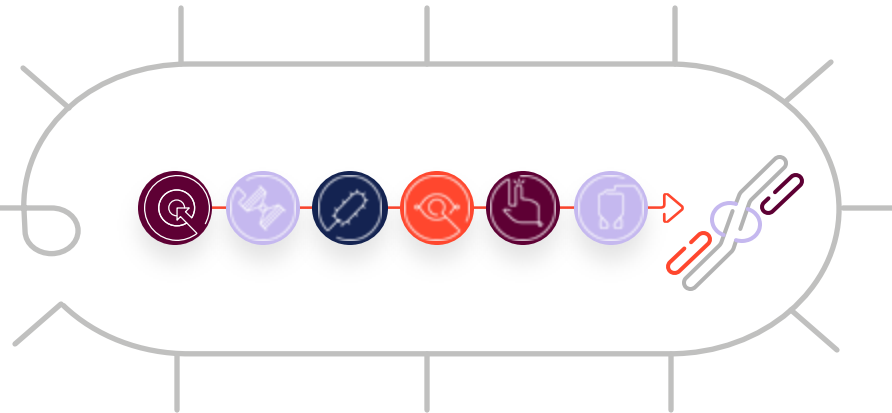
Novel target
identification

Antibody
discovery

Reformat in
desired scaffold

Manufacturing cell
line development

...or

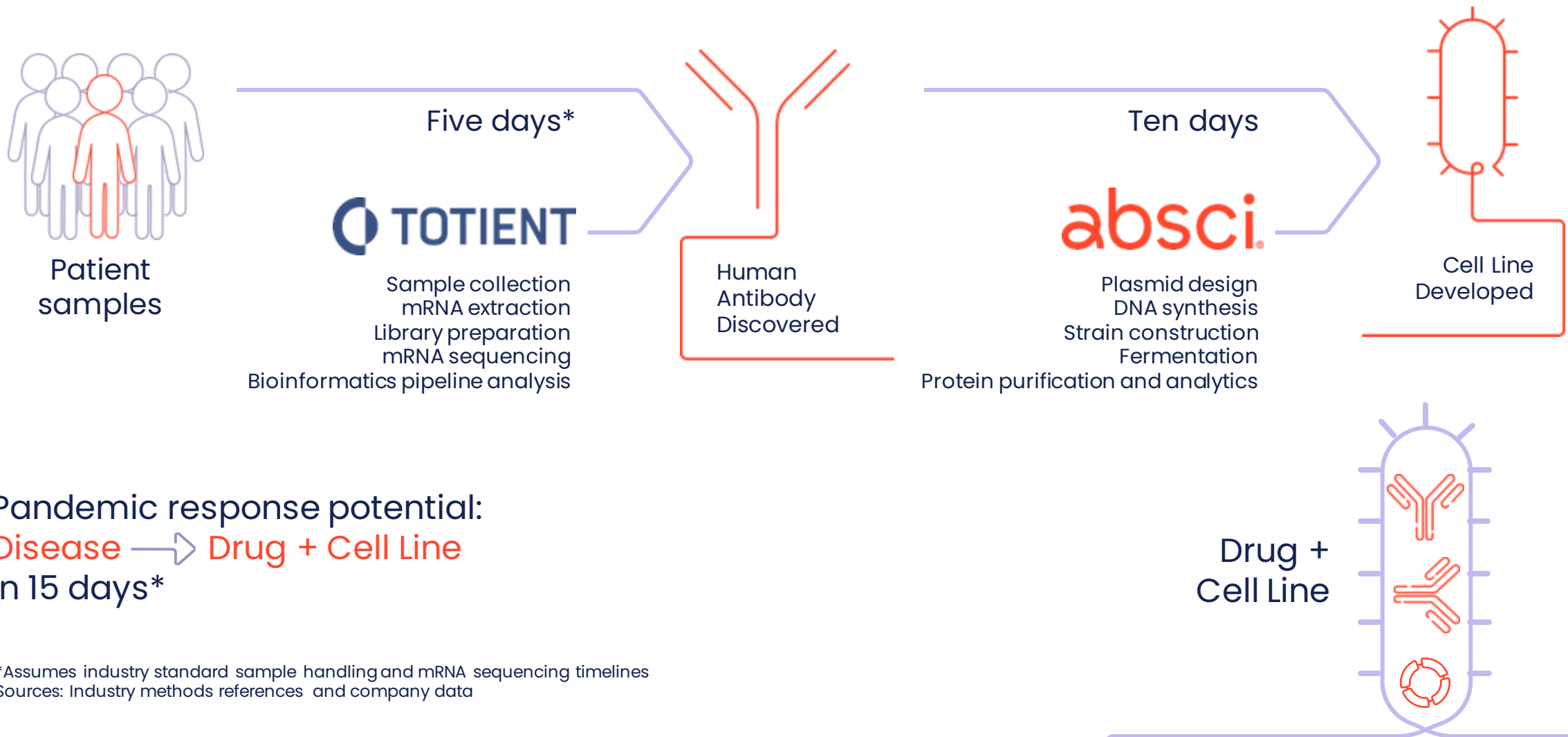


Integrated Drug Creation™

Integrated Drug Creation™ Platform



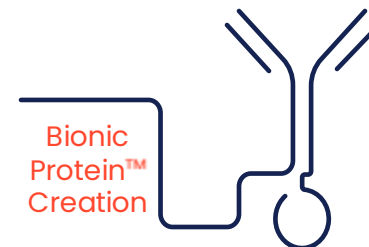
COVID-19 response: a case study in two parts



*Assumes industry standard sample handling and mRNA sequencing timelines
Sources: Industry methods references and company data

Redefining drug discovery

Drug Creation™ Applications



Discovery

Cell Line Development

Bionic Proteins™ – out-evolving nature

Unlocking new molecular functionalities with
incorporation of non-standard amino acids

CHEMICAL MODIFICATIONS

CONJUGATES

FUSIONS

PEGYLATION

GLYCOSYLATION

What could you do with a new letter in your alphabet?

Redefining drug discovery

Drug Creation™ Applications



Discovery

Cell Line Development

Out-evolving nature

In Silico Drug Creation™

We aim to optimize complex solution space *in silico* – no screening required

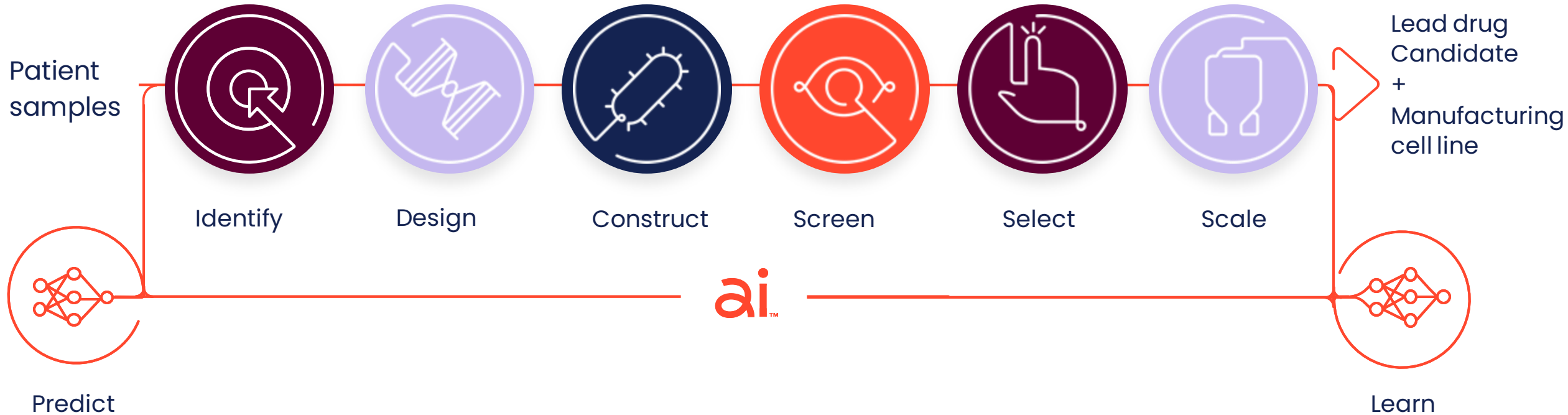
With more theoretical protein sequence variants than predicted atoms in the observable universe, it is IMPOSSIBLE to screen all amino acid combinations



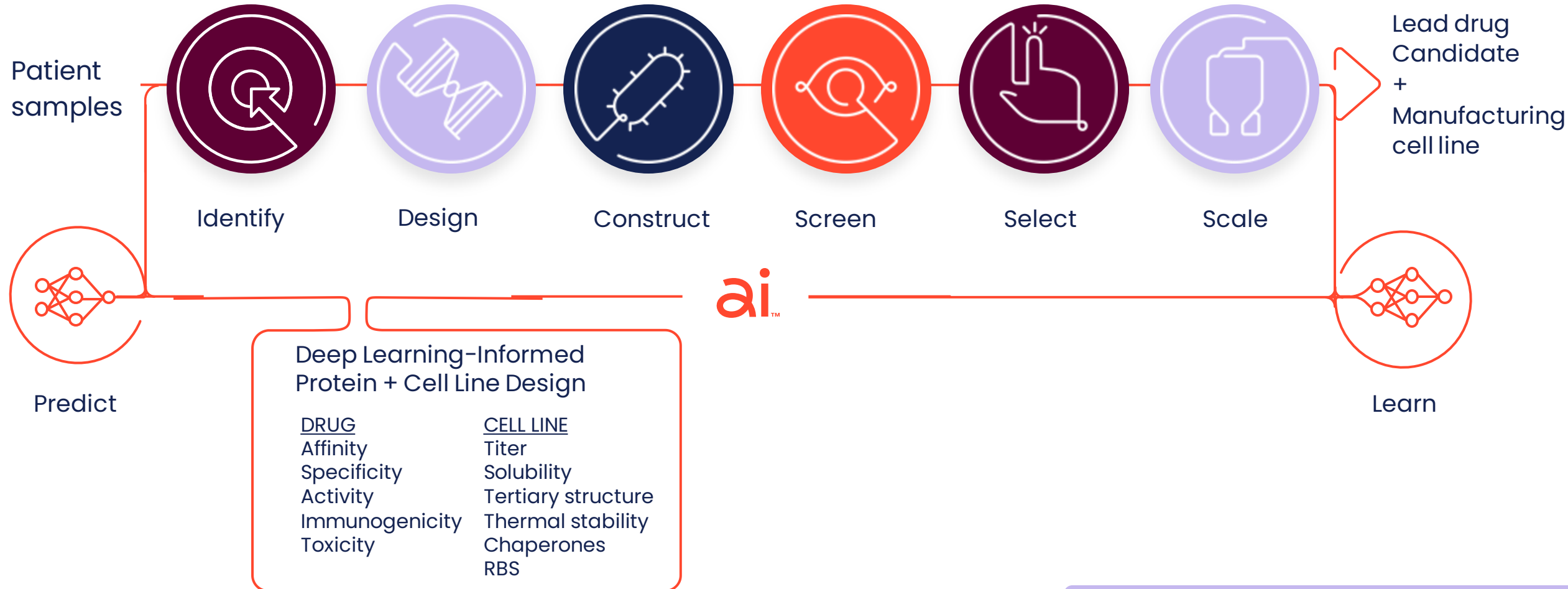
Absci-generated data feed Denovium Engine™ models to allow us to predict relevant variation, enhance our Integrated Drug Creation™ Platform, and may eventually enable *in silico* design

Redefining drug discovery

Integrated Drug Creation™ Platform



Integrated Drug Creation™ Platform



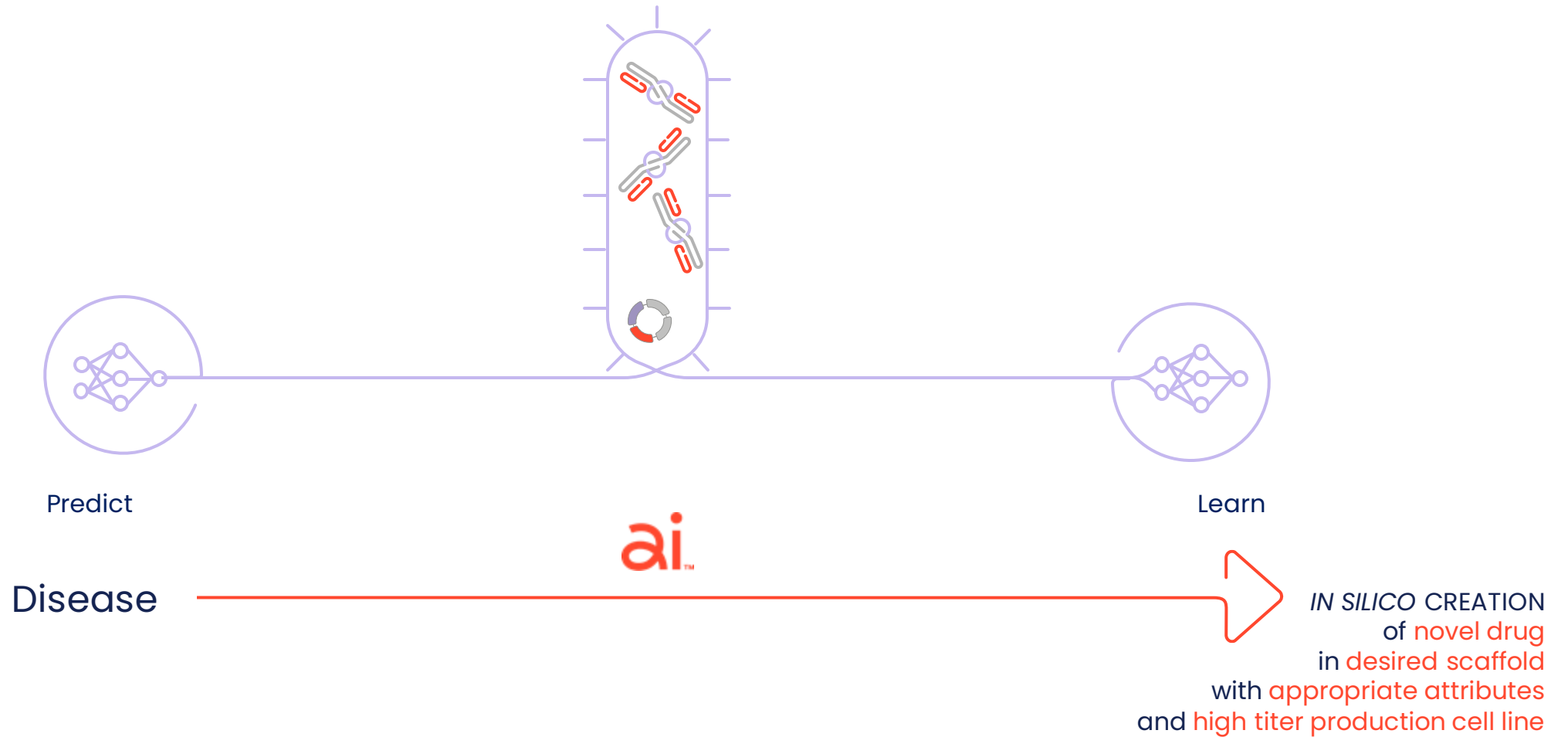
What if

we could design new
drugs and cell lines with
the click of a button?



Out-evolving nature

Fully *in silico* design



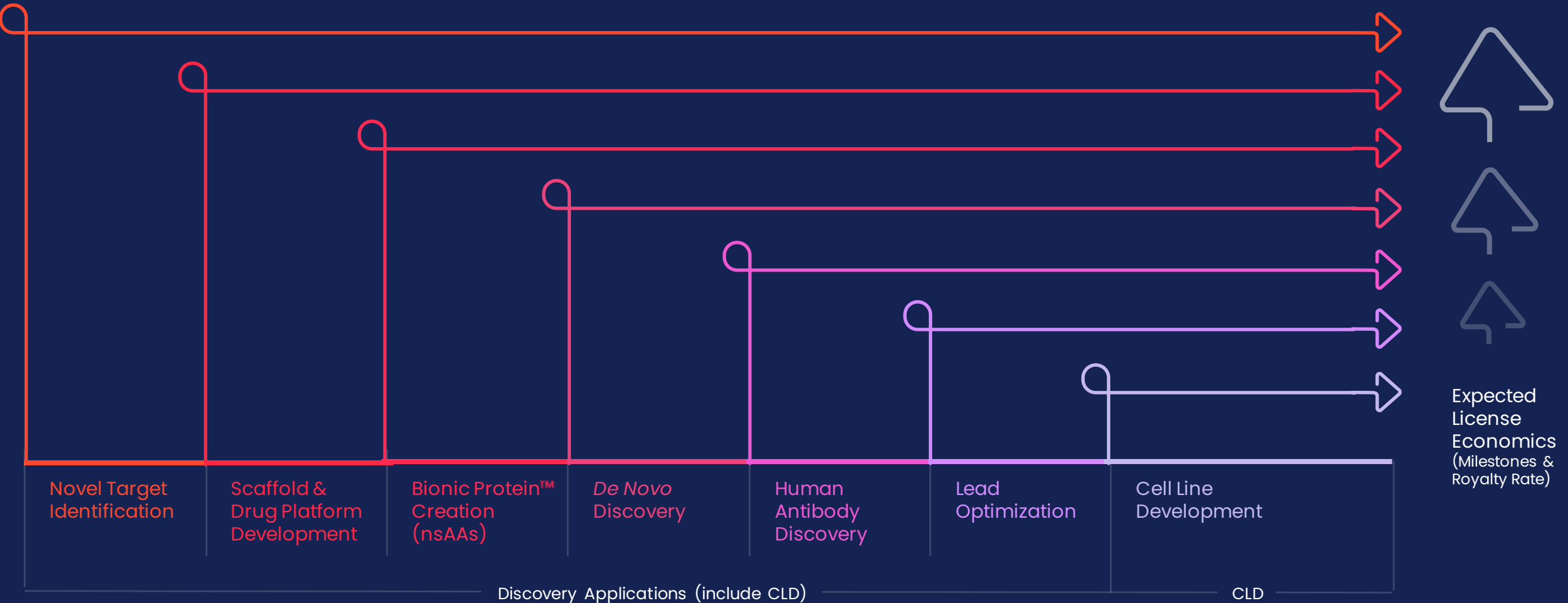
Unlimiting possibilities,
broadening pipelines,
driving efficiencies,
out-evolving nature



Economic opportunities from discovery through commercialization



A flexible platform unlocking the promise of biologic opportunity for partners

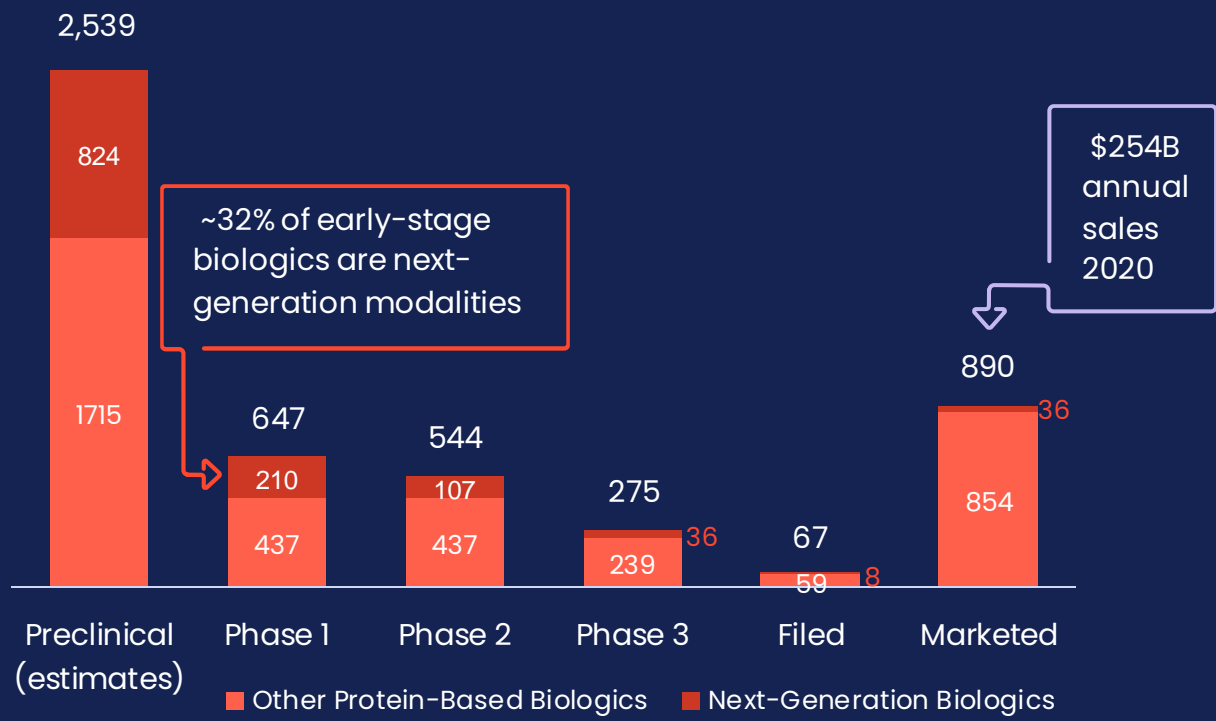


The future of pharma is next-generation biologics

Significant challenges to discover and manufacture new modalities with conventional processes

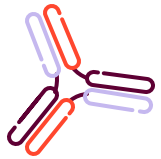
of Protein-Based Biologics* by Development Stage in 2020

* Includes mAbs, mAb conjugates, recombinant products; excludes cell therapies, DNA & RNA therapies, gene therapies, plasma-derived therapies, and vaccines

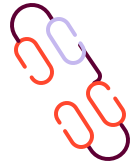


Source: Evaluate Pharma and company estimates

We take our partners' molecular concepts from *what if* to *what is*



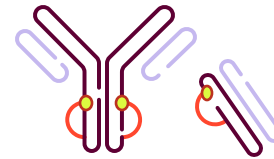
Multivalents



Novel Fusions



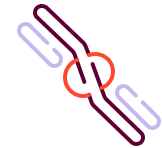
Cytokine
Derivatives



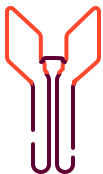
nsAA Bionic Proteins™
& Conjugates



scFVs



T-cell Engagers



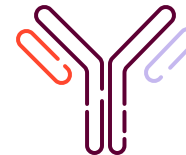
Fc-Fusions



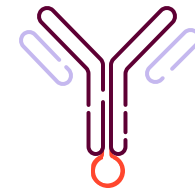
Fabs



VHHs



Bi-Specific
Antibodies



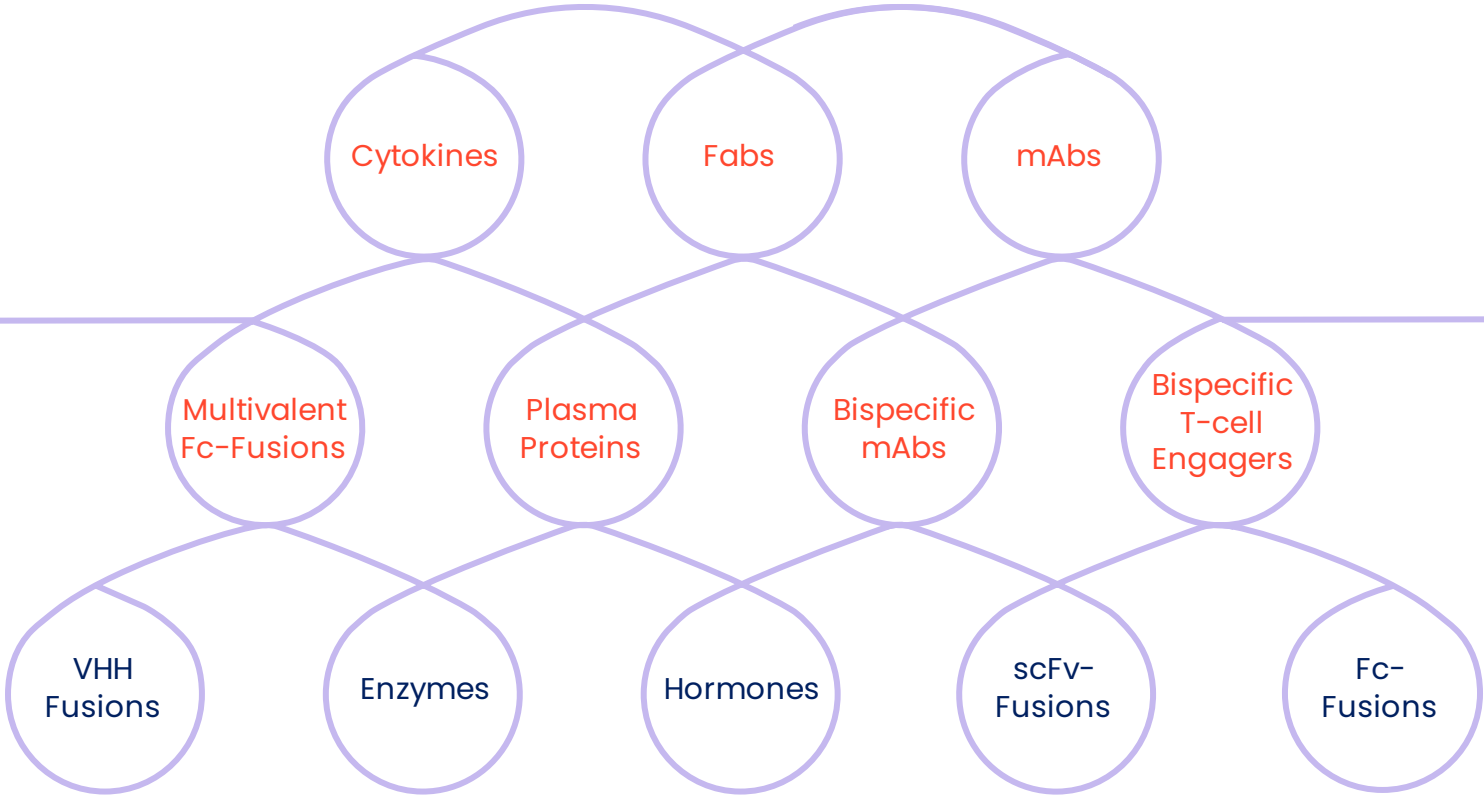
Antibody-Drug
Conjugates

Success with a diverse range of molecules

9
Active
Programs*

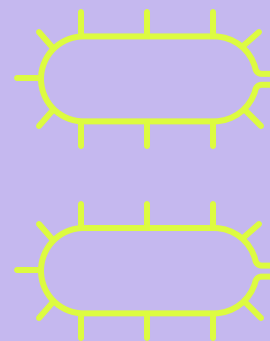
31
Unique
Molecules

* As of June 30, 2021; Active Programs: programs in which we have negotiated, or expect to negotiate, license agreements for downstream milestones and royalties



Evolution of a Partnership: Astellas Collaboration

Initiated partnership
focused on Cell Line
Development for certain
MicAdaptor molecules



Expanded partnership to
include Lead Optimization for
certain MicAbody candidates

Initial success and effective alliance management

This is only the beginning—proteins are everywhere



Anyone can talk about changing the world.
We're actually doing it—breaking through
nature's constraints to **unlimit** new
opportunities for the biopharmaceutical
industry.

What does that look like?



A team of unlimiters focused on creating the impossible



Sean McClain
Founder and Chief Executive Officer
Director



Matthew Weinstock, PhD
Chief Technology Officer



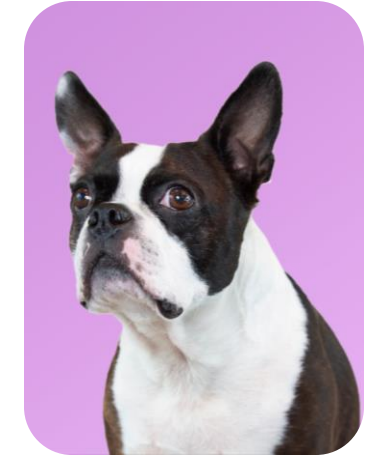
Greg Schiffman, CPA
Chief Financial Officer



Nikhil Goel, MS, MBA
Chief Business Officer



Sarah Korman, PhD, JD
General Counsel



Penelope
Chief Morale Officer

Board of Directors



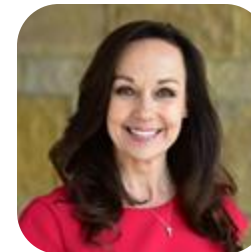
Ivana Magovcevic-Liebisch, PhD, JD
CEO & President, Vigil Neuroscience
Board Chair



Eli Casdin
CIO, Casdin Capital



Zach Jonasson, PhD
Managing Partner, PVP



Karen McGinnis, CPA
CAO, Illumina



Amrit Nagpal
Managing Director, Redmile Group



Just because something hasn't been
done, doesn't mean it can't be done.

When we hear something is
“impossible,” we set out to find a way
to make it real.

Join us

Translate ideas into impact™

absci.

Thank you

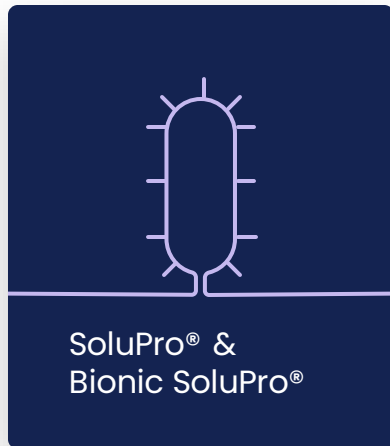


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Appendix



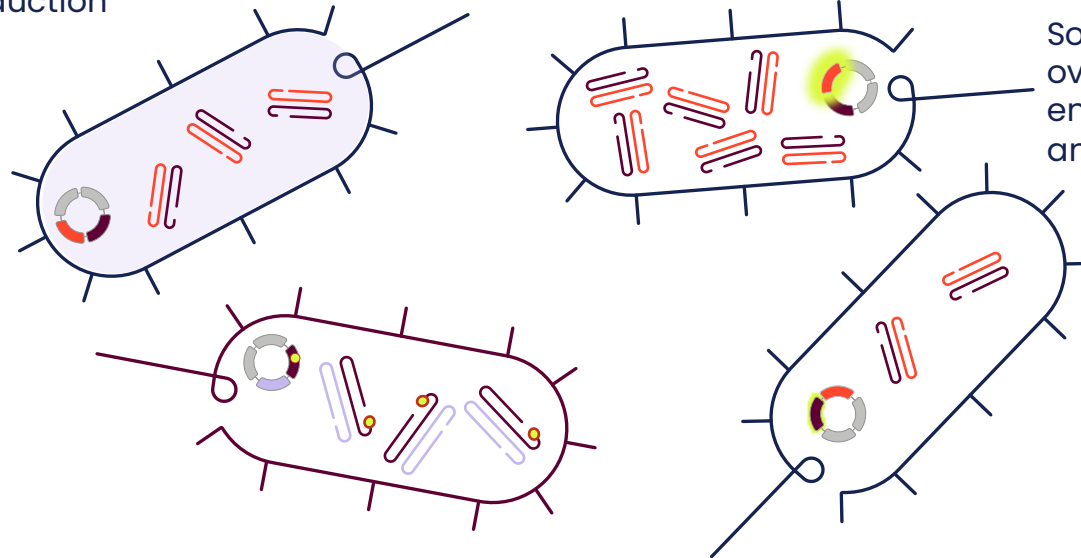
SoluPro® & Bionic SoluPro® – *E. coli* strain designs



Patented *E. coli* cell lines bioengineered for production of mammalian proteins and proteins incorporating nsAAs

Semi-oxidized cytoplasm

Engineered redox environment to achieve scalable, soluble protein production



Precise expression control

SoluPro® achieves precise control over induction through genetic engineering of metabolic pathways and proprietary plasmid design

Bionic SoluPro® for nsAA incorporation

SoluPro® strain optimized for high-efficiency incorporation of non-natural amino acids

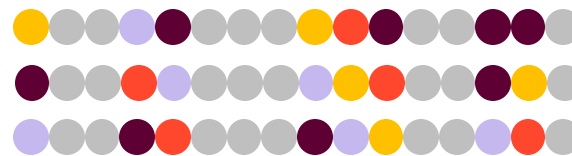
Custom Scaffold Libraries – design and construction



Custom libraries of sequence variants created for any desired scaffold architecture, whether naturally-occurring, pre-existing, or newly imagined

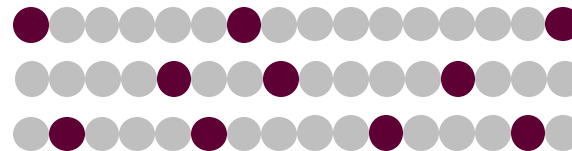
Rationally defined diversity

Exquisite control over defined amino acid diversity at any region or position in the protein enables rational library design



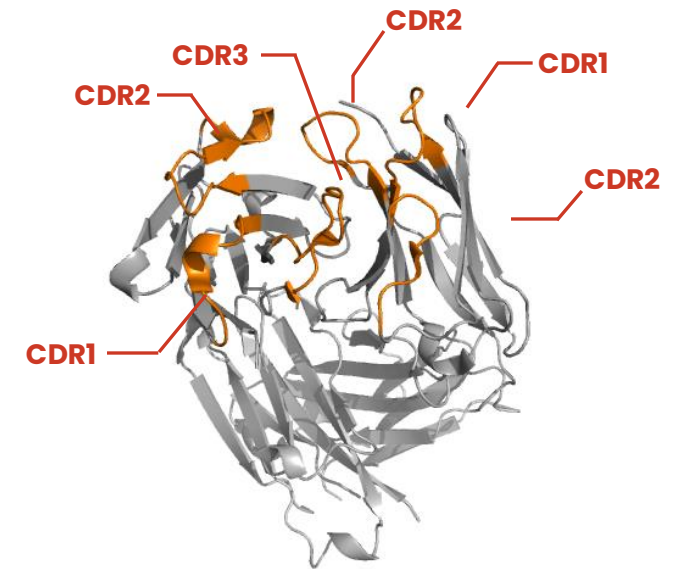
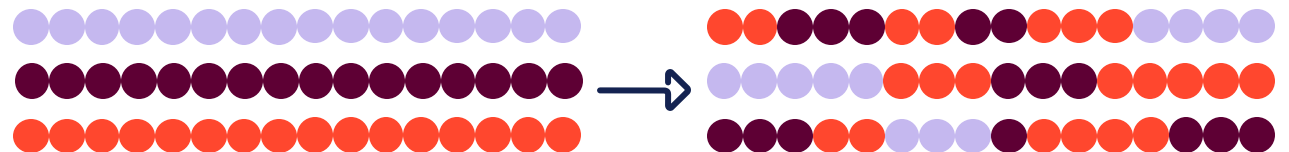
Random mutagenesis

Multiple approaches enable random mutagenesis across the whole protein or isolated to defined regions/positions

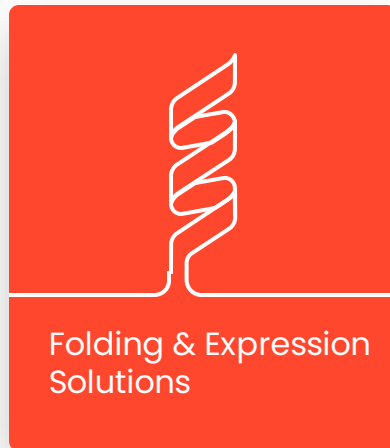


Gene shuffling

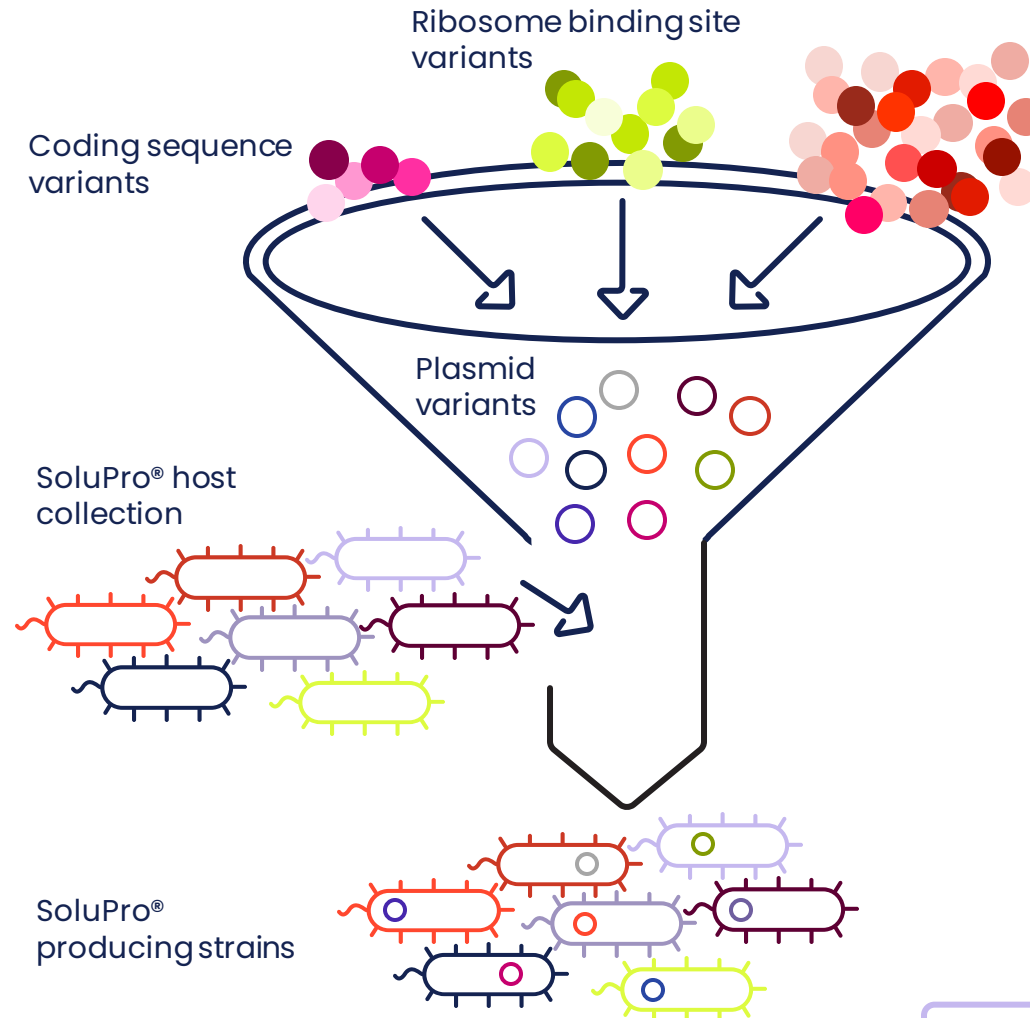
Multiple related promising “hits” can be recombined to generate novel sequences with higher probability of improved traits



Folding & Expression Solutions – pooled library construction



Curated collection of modular genetic elements to customize SoluPro® strains for optimal production of any given protein



Proprietary chaperone collection

Expression plasmid libraries

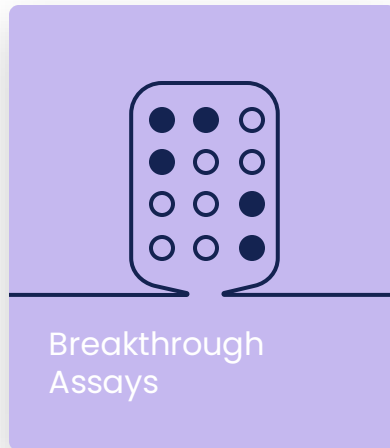
Constructed from proprietary libraries of genetic elements including codon-optimized target-coding sequences (CDS), ribosome binding site sequences, and chaperones

Plasmids transformed into SoluPro® host

Additional diversity can be introduced by leveraging other host variants to screen for proteolysis and protein overexpression

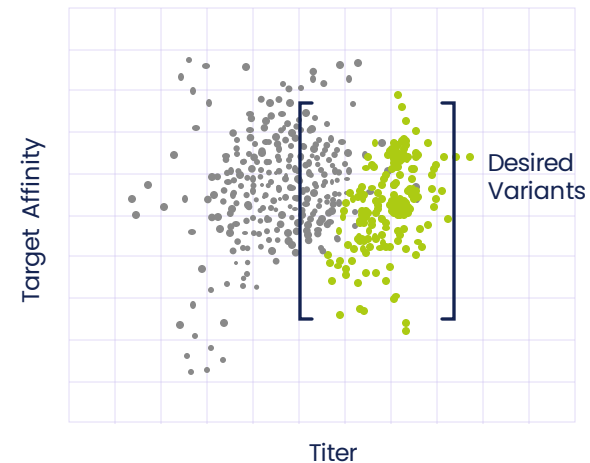
Library diversities can exceed multiple millions of unique variants

Breakthrough Assays – high throughput single-cell screening techniques



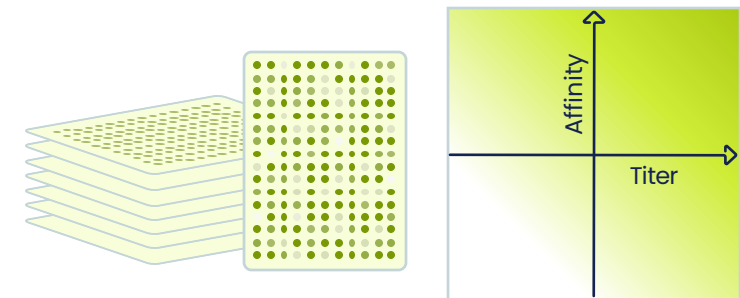
Proprietary high-throughput techniques for screening billions of single cells for target binding affinity, quality, and titer of protein-of-interest

Antigen-specific Cell Enrichment Assay (ACE Assay™): high-throughput single cell evaluation and sorting of diverse cell populations representing millions to billions of discrete genotypes



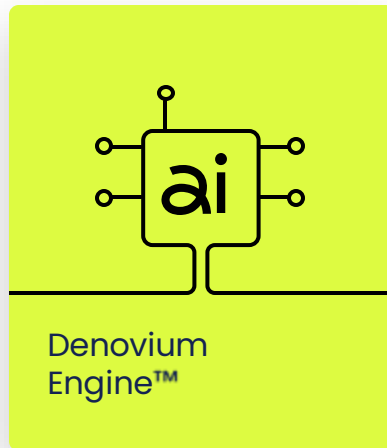
Upon sorting, high-titer strains expressing high-affinity proteins become a larger percentage of the strain population, and can be isolated as individual clones for further screening

High-throughput Proximity Binding Assay (HiPrBind Assay™): multiplexed plate screening of clonal strains for quantitative evaluation of expressed protein titer and target affinity



HiPrBind Assay™ discriminates titer and affinity based on signal concentration and amplitude

Denovium Engine™: deep learning protein model designed for functional output



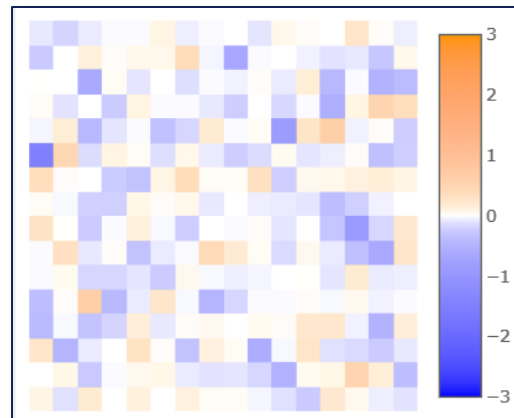
Deep learning AI models of protein function and manufacturability harnessing large assay datasets to inform future designs *in silico*

Trained on >100M proteins and >700,000 functional labels

Protein sequence

>Cytochrome p450 CYP19A2
MTTAPSLVPVTTSPQHAGAGVPHLGIDPFALDYFADPYPEQETLREAGPVVYLDKWNVYG VARYAEVYAVLNDPLTFCSSRGVGLSDFKKE KP
WRPPSLILEADPPAHTRT RA VLSKVL SPATM KRLRDGFA AAA DA KIDELLA RGG NIDA IA DLAEA YPLS VFPA MGL KQEG RENLL PYA GLVFNA
FGPPNELRQSAIERSAPHQAYVAEQC QRPNL APG GFGACIHAFSDTGEITPEEAPLL VRSLLSAGLDTTVNGIAAAVYCLARFPDEFARLRADP
SLARNAFEEAVRFESPVQTFRTTTRDVELAGATIGEGE KVLMLFG SANRDP RRWDDPDYDIT RKT SGHVGFG SGVHMC VGQLVARLEGE
VVLAALARKVAAIEIAGPL KRRF NNTLRGLESPIQLTPA

High-dimensional embedding



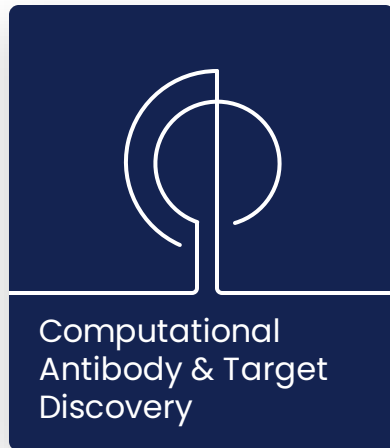
- Structural information
- Activity
- Transmembrane regions
- Binding affinity
- Expressibility
- Stability
- Solubility
- And much more....

Functional embedding clustering of
>500K proteins in Swiss-Prot

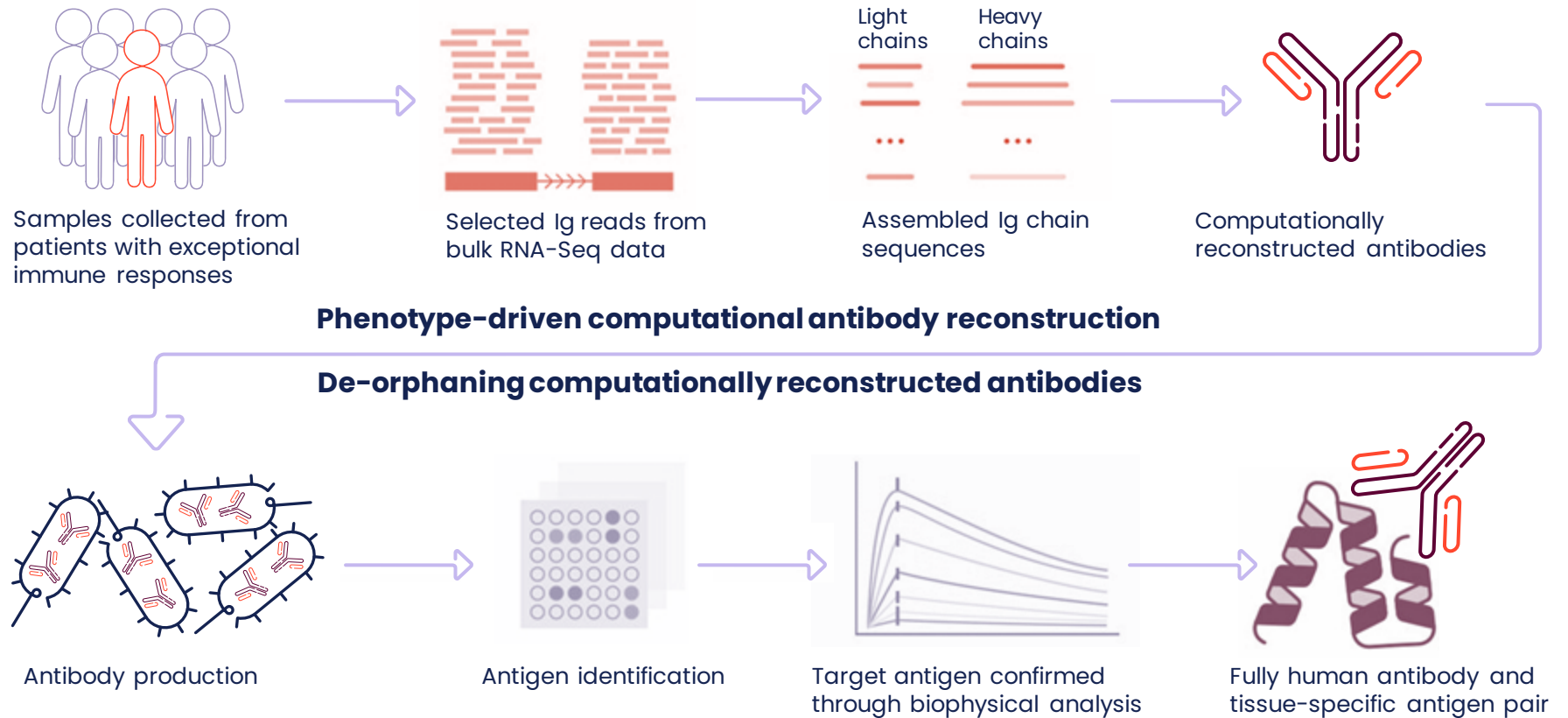


Ref: Schwartz *et al.* 2018
DOI: 365965

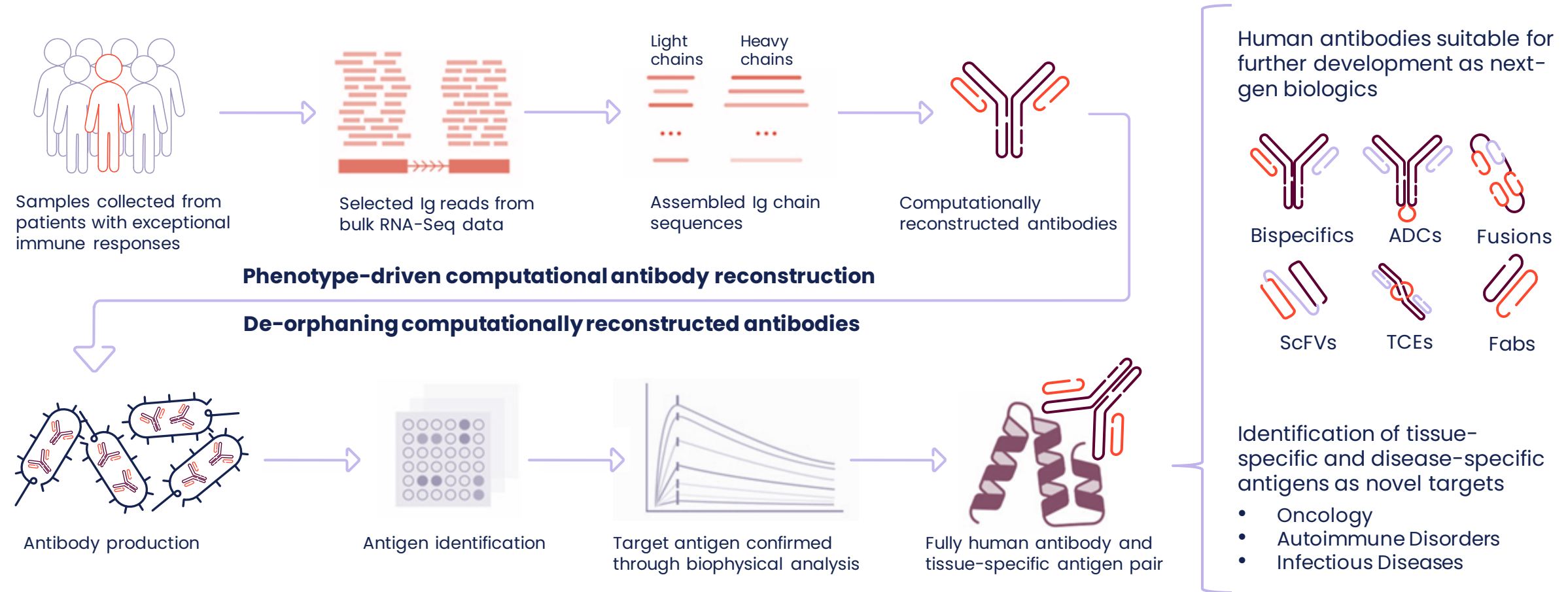
Computational Antibody & Target Discovery – from sample to target identification



Bioinformatics
technology for
reconstructing human
antibody sequences
from tissue RNA, and
identifying
corresponding antigens
as potential drug targets

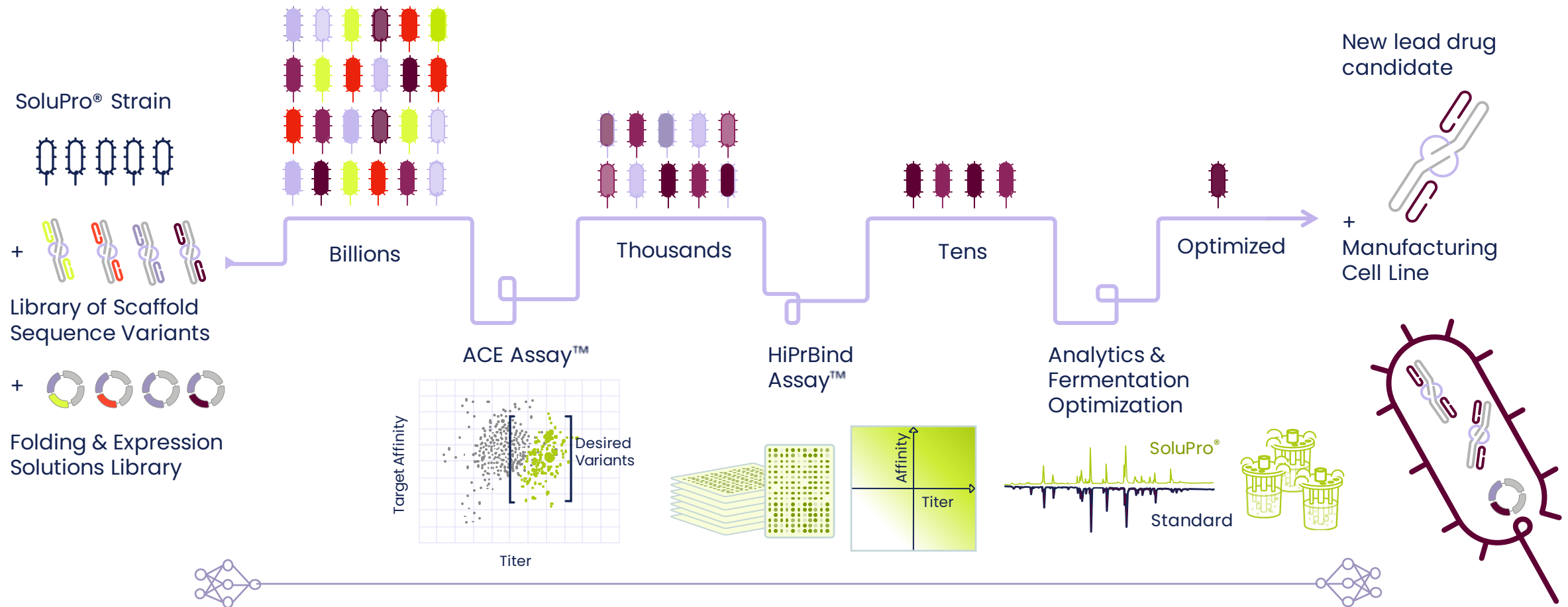


Computational Antibody & Target Discovery



From target to lead drug candidate in a desired scaffold

Simultaneous drug discovery & cell line development



Why wouldn't you include "manufacturability" in lead candidate selection?

Out-evolving nature

Identification of novel chaperones: Denovium Engine™ case study

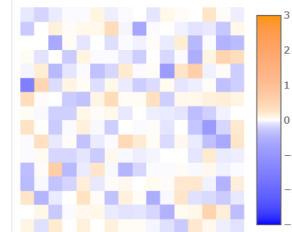
Input

>Canonical chaperones
~200 sequences

```
MTTAPSLVPVTPPSQHGAGVPHLGIDPFALDYF  
ADPYPEQETLREAGPVVYLDKWNVYGVARYA  
EVYAVLNDPLTFCSSRGVGLSDFKKEKPWRPP  
SULEADPPAHTRTRAVLSKVLSPATMKRLRDGF  
AAAADAKIDELLARGGNIDAIADLAAYPLSVFP  
DAMGLKQEGRENILPYAGLVFNAGFPNLRQ  
SAIERSAPHQAYVAEQCQRPNLAPGGFGACI  
HAFSDTGEITPEEAPLLVRSLLSAGLDTTVNGIA  
AAVYCLARFPDEFARLRADPSLARNAFEEAVRF  
ESPVQTFFRITTRDVELAGATIGEKEKVLMLF
```



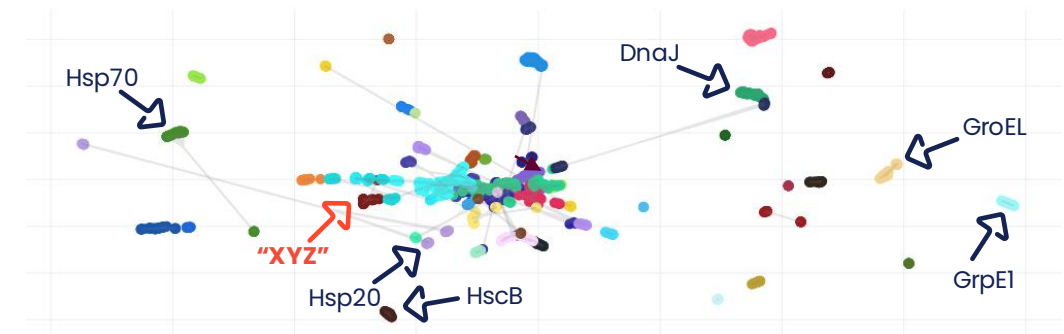
High-dimensional
functional embedding



Search for functional
embedding homologs

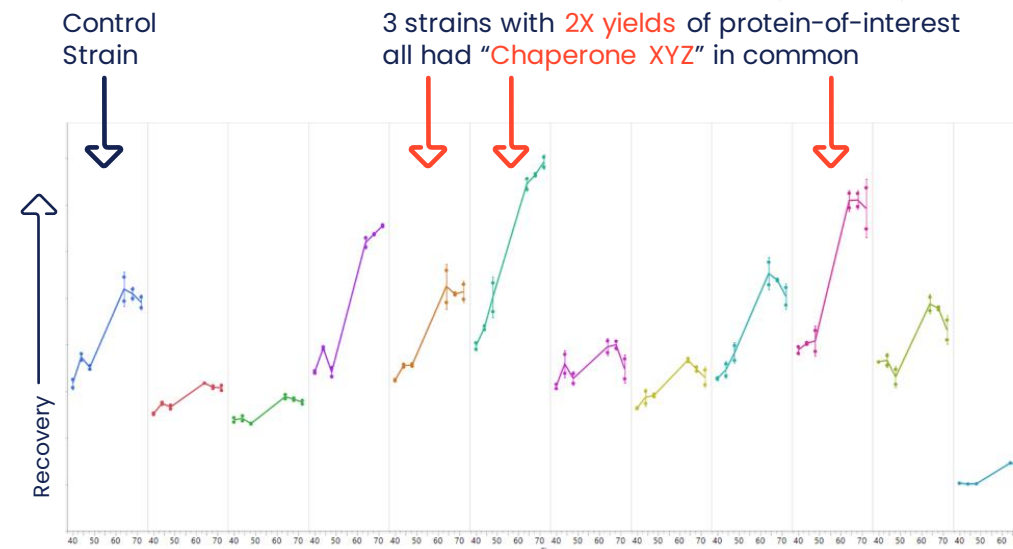


Identification of >1,000 predicted chaperones by
functional embedding mapping



A non-canonical chaperone
identified using Denovium
Engine™ deep learning AI
conferred nearly **2-fold
increases in expression**

"Chaperone XYZ" was a protein
of unknown function from a
root bacterium



Include new predicted chaperones in
Folding & Expression Solutions libraries