absci®

```
from absci import de_novo_model
model = de_novo_model.load_latest()
antigen = model.load_pdb("7olz.pdb",
chain="A")
antibodies = model.predict(antigen, N=300000)
```

```
from absci_library import codon_optimizer
library
= codon_optimizer.reverse_translate(library)
library.to_csv("covid-antibody-designs.csv")
library.to_wet_lab(assay="ACE")
```

```
from absci import lead_opt_model
lead_optimizer = lead_opt_model.load_latest()
library.naturalness =
lead_optimizer.naturalness(library)
lead_optimizer.optimize(library).to_wet_lab(as
say="SPR")
```

DRUG CREATION

R&D DAY 2023

```
from absci import genetic_algorithm; parameters=["maximize|binding_affinity:pH=7.5", "minimize|binding_affinity:pH=6.0",
"maximize|human_naturalness"]; library = genetic_algorithm.multiparametric_optimization(library, parameters, evolutions=100);
library.to_wet_lab(assays=["ACE", "SPR", "Bioassays"])
```

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,” “predicts,” “advancing,” “aim,” and “intends,” or similar expressions. We intend these forward-looking statements, including statements regarding our strategy, our expectations and guidance regarding cash, cash equivalents and our projected cash runway, future operations, internal research and technological development activities, estimated speed and cost advantages of leveraging our AI drug creation platform, the potential IND filing stage for assets in our internal pipeline; our expected operational efficiencies, advancements toward in silico drug design, research and technology development collaboration efforts, growth plans, 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 as well as the assets in our internal pipeline, our ability to secure milestone payments and royalties, and our ability to effectively conduct research, drug discovery and development activities with respect to our internal programs and to collaborate with our partners or potential partners with respect to their research, drug discovery and development activities; 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.

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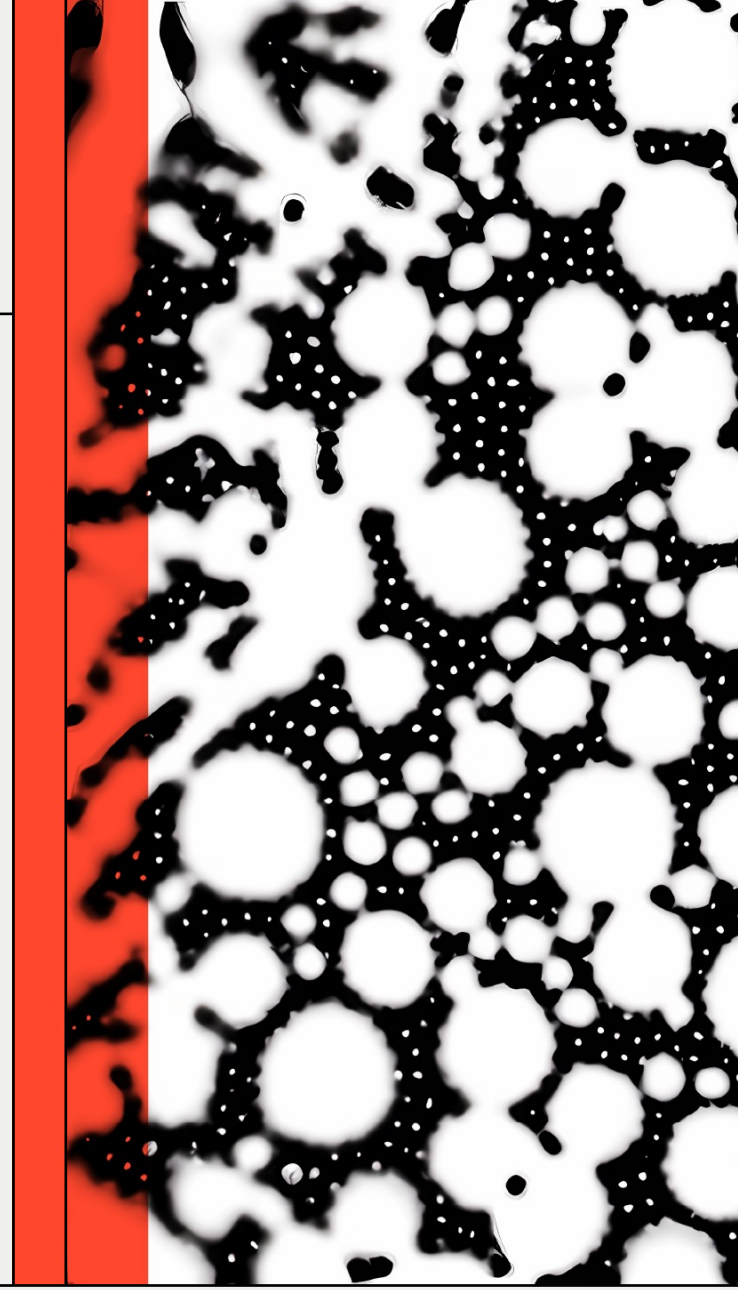
Agenda

Breakfast 8:00 – 9:00	
Opening Remarks	Sandi Peterson | Lead Independent Director, Microsoft
Absci Overview	Sean McClain | Founder & CEO, Absci
Business Updates	Zach Jonasson, PhD | CFO & CBO, Absci
Innovation	Andreas Busch, PhD | Chief Innovation Officer, Absci
Break	
Partner Presentation	Jonathan Cohen | VP Applied Research, NVIDIA
AI Platform	Amaro Taylor-Weiner, PhD | Chief AI Officer, Absci
Drug Creation & Pipeline	Christian Stegmann, PhD | SVP Drug Creation, Absci
Closing Remarks	Sean McClain | Founder & CEO, Absci
Q&A	
Reception 12:00 - 1:00	



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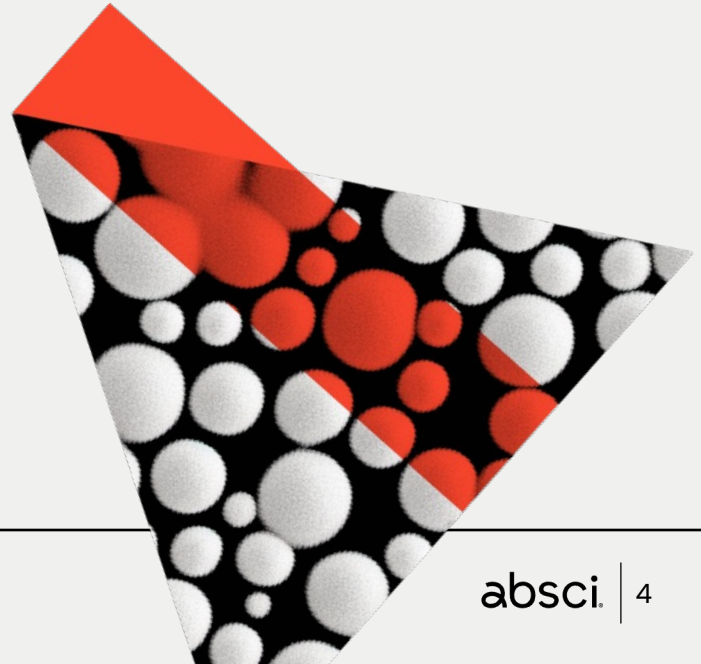
Opening Remarks

Sandi Peterson

Lead Independent Director, Microsoft
Operating Partner, Clayton Dubilier & Rice



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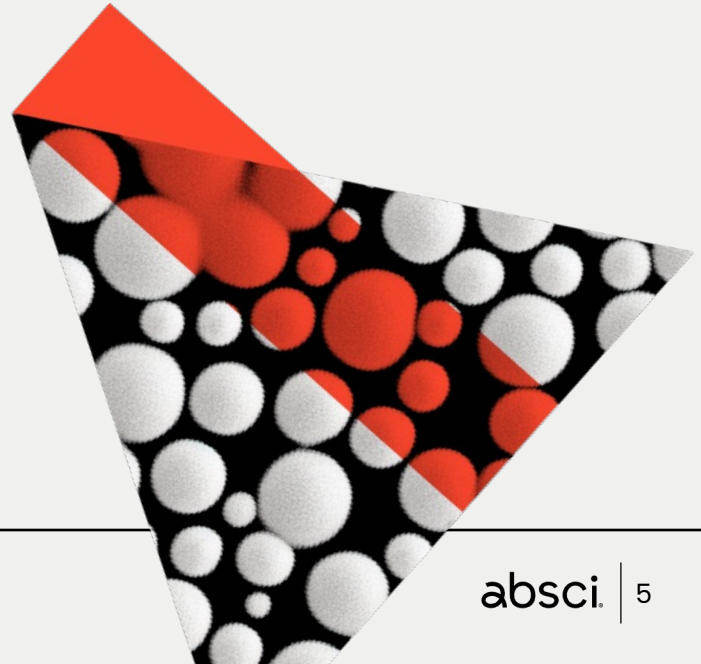
```

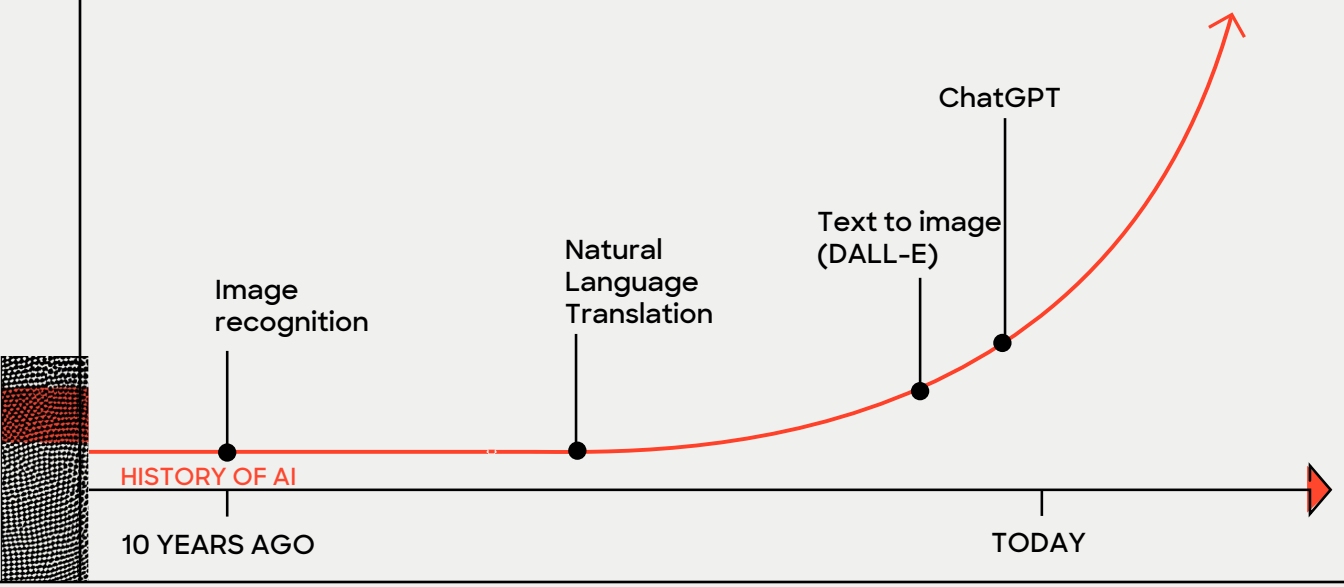
Absci Overview

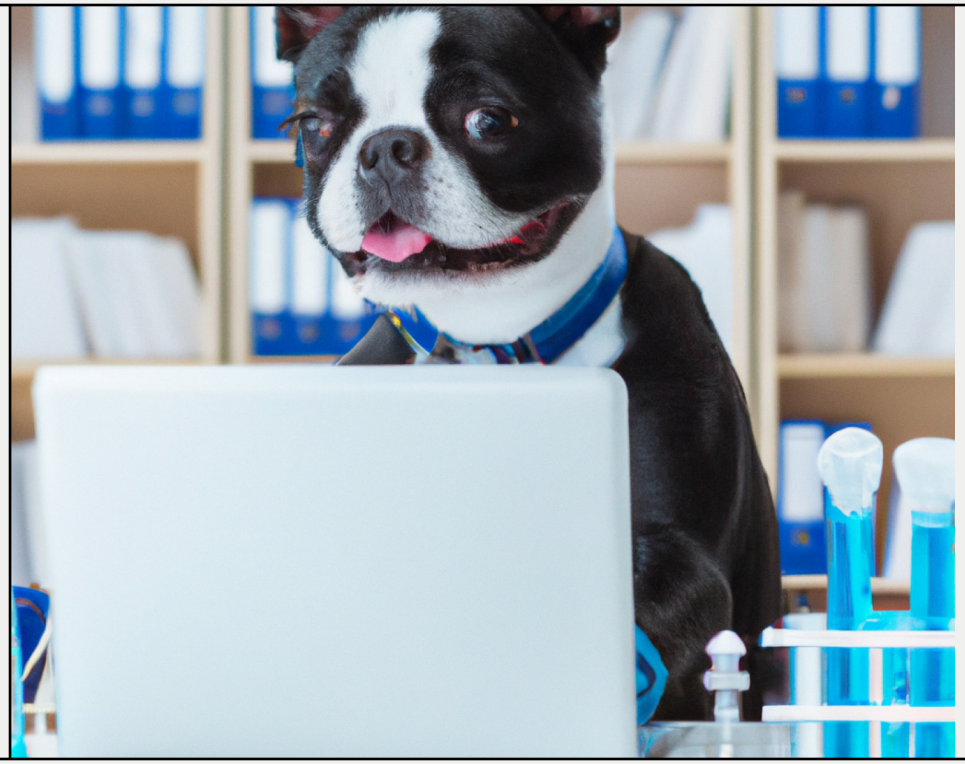
Sean McClain

Founder & CEO



What if the next transformative drug was not discovered but created with a click of a button?





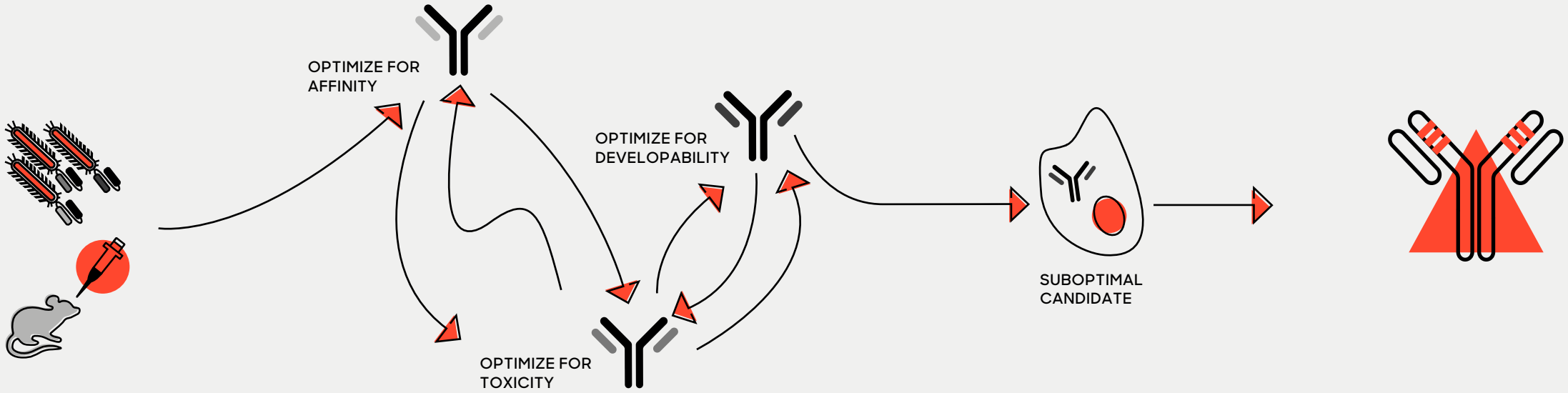
DALL-E generated image of Penelope (Absci's Chief Morale Officer) discovering biologics on a computer.

THE PROBLEM

The drug discovery paradigm is ripe for disruption

5.5 YEARS FROM DISCOVERY TO IND

<5% SUCCESS RATE FROM DISCOVERY TO LAUNCH

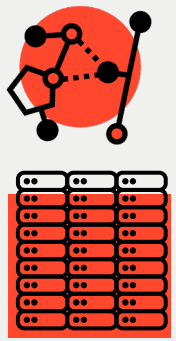


Long iterative process resulting in drug candidates with suboptimal attributes

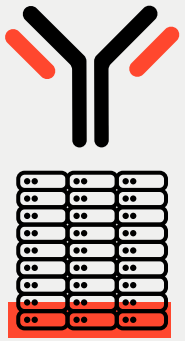
WHY HASN'T GENERATIVE AI TRANSFORMED BIOLOGIC DRUG DISCOVERY?

Unlocking the potential of generative AI in biology requires scalable biological data

Small Molecule v. Biologic

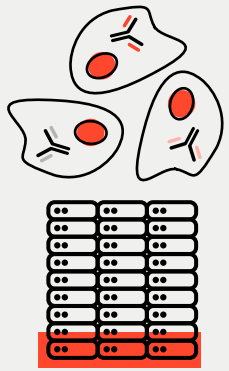


Extensive Libraries



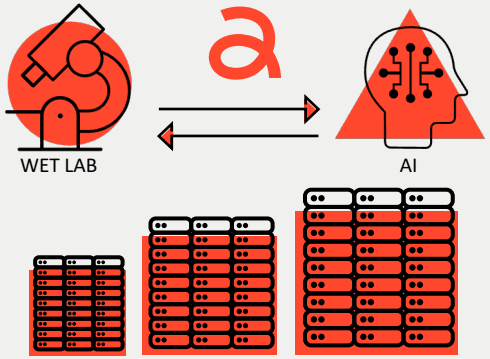
Limited Data

Biologics require living organisms to produce drug variants for testing



Consistent and accurate data is limited

Unlocking the potential of generative AI in biology...



...requires generating scalable biological data

BIOTECH INDUSTRY INFLECTION POINT

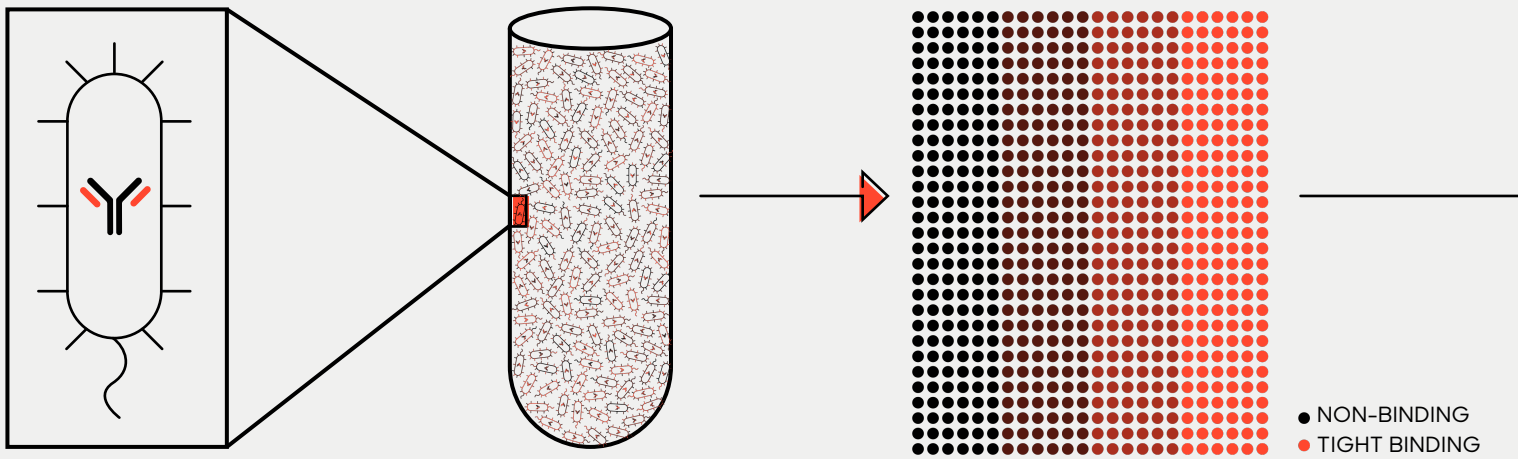
Absci is solving the problem of scalable biological data enabling true generative AI for biologics drug discovery

Absci's *E.coli* SoluPro™ cell line

Billions of cells, expressing proteins of interest

Absci's ACE Assay™ screens millions of unique drug variant candidates

High-quality data flows into Absci's generative AI engine



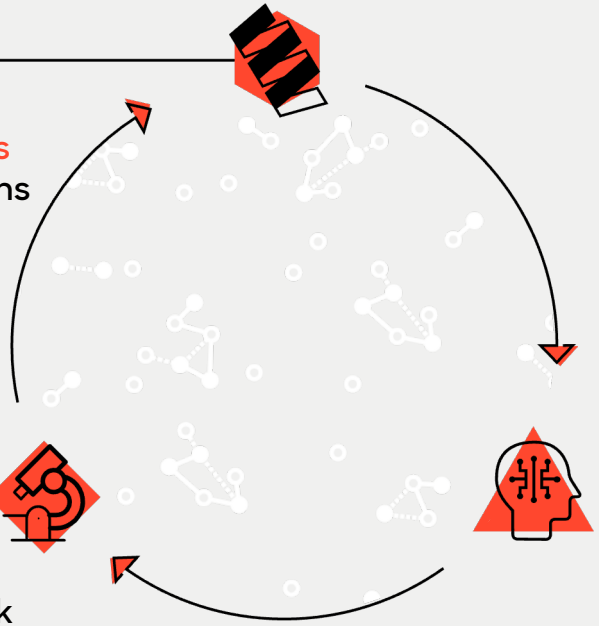
ai™

THE FLYWHEEL EFFECT WITH SCALABLE BIOLOGICAL DATA AND AI

Integrated Drug Creation™ Platform

DATA TO TRAIN

Proprietary wet-lab assays capable of generating billions of protein-protein interactions a week for ML training



WET LAB TO VALIDATE

Scalable wet-lab infrastructure capable of validating 2.8 million unique AI-generated designs a week

AI TO CREATE

Generative AI engine to create new antibodies and next-gen biologics

Absci's platform and rapid 6-week cycle times allow for:

01

Rapid iteration and improvement of AI models

02

Reduction of preclinical development timelines and increased probability of success

03

Accelerated achievement of mission and recruitment of top AI talent

04

Advanced insight and learnings of potential and progress of generative AI in biology

Absci is the first to design and validate novel antibodies* using zero-shot generative AI

***March 2023**

Designed and validated novel antibodies by CDRs design using zero-shot generative AI - unlocking the potential to go from target to therapeutic antibody at a click of a button
(Shanehsazzadeh et al. 2023)

Feb 2023

Solved longstanding codon optimization problem and created largest expression database of its kind to optimize DNA codon sequences and maximize protein yield. Important for biomanufacturing.
(Constant et al. 2023)

Aug 2022

Used artificial intelligence to simultaneously optimize multiple parameters important to drug discovery and development
(Bachas et al. 2022)

ABSCI'S END-TO-END PLATFORM SOLUTION

The leading full-stack AI platform for biologics drug creation

Leverage deep disease insights with novel approaches

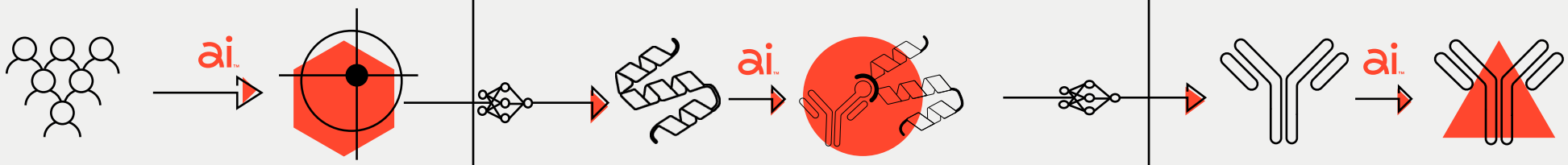
Reverse Immunology for target discovery

AI-guided antibody drug creation

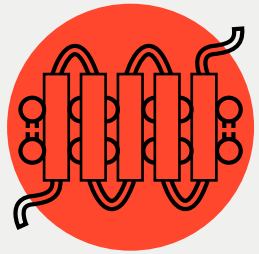
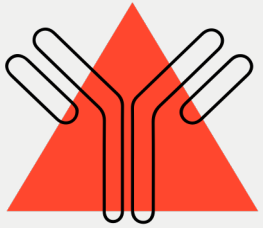
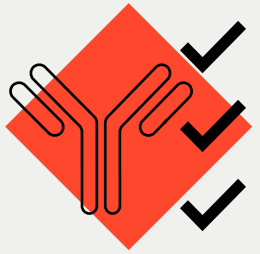
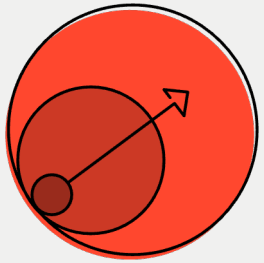
Biologics at a click of a button

AI guided antibody optimization

Multi-parameteric optimized antibodies



Potential to unlock new and differentiated value drivers

ACCESS NOVEL DISEASE BIOLOGY	SUPERIOR DRUG ATTRIBUTES	REDUCED TIME TO CLINIC	INCREASED PROBABILITY OF SUCCESS	EXPANDED INTELLECTUAL PROPERTY SPACE
				
Ability to address elusive drug targets, e.g. GPCRs, Ion Channels	Multi-valent biologics, Increased half-life, Conditional pH dependent binding	Drug creation process significantly shortened	Multi-parametric optimization creates higher quality biologics	AI-drug creation generates broader IP for First-in-Class and finds new IP for Fast Follower/Best-in-Class
Enabling First-in-Class	Enabling Best-in-Class	Faster Time to IND	Higher Program NPVs	Defense + Best-in-Class

Team of innovators and trailblazers to achieve the impossible

EXECUTIVE LEADERSHIP TEAM

SEAN MCCLAIN
Founder & CEO Director

ANDREAS BUSCH, PHD
Chief Innovation Officer

ZACH JONASSON, PHD
Chief Financial Officer and Chief Business Officer

JACK GOLD
Chief Marketing Officer

KARIN WIERINCK
Chief People Officer

AMARO TAYLOR-WEINER, PHD
SVP, Chief AI Officer

PENELOPE
Chief Morale Officer

BOARD OF DIRECTORS

KAREN MCGINNIS, CPA
Former CAO,
Illumina

FRANS VAN HOUTEN
Former CEO,
Royal Phillips

AMRIT NAGPAL
Managing Director,
Redmile Group

DAN RABINOVITSJ
Vice President
Connectivity, Meta

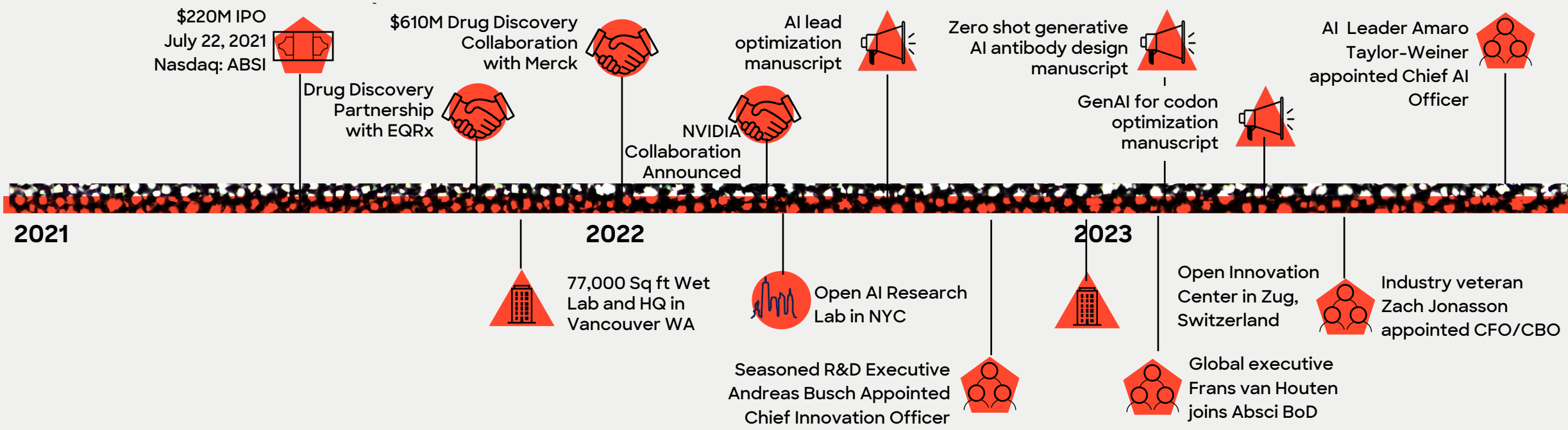
JOSEPH SIROSH, PHD
Vice President,
Alexa Shopping, Amazon

Meta amazon PHILIPS

MIT BAYER Shire

Microsoft illumina HARVARD UNIVERSITY

Increasing momentum to revolutionize AI Drug Creation



Select Partners

MERCK · NVIDIA · EQRx · Caltech · University of Oxford · SFJ Pharmaceuticals® Strategic Funding and Joint-Development · Saint John's Health Center PROVIDENCE Health & Services · Aster Insights™

The AI Drug Creation Revolution is only just beginning

>160	Unlimiters with deep experience in AI, drug discovery, immunology, and synthetic biology
Leading AI team with expertise from:	NVIDIA, Google, MIT, Microsoft Research, Harvard University, insitro, Twitter, Stanford University, OpenAI, Meta, Tesla
Biologics drug discovery expertise from:	Bayer, Takeda, Pfizer, Johns Hopkins Medicine, novo nordisk, Broad Institute, Shire, University of Oxford
77,000+ Square Feet	State-of-the-art drug creation and wet lab space in Vancouver WA, Absci AI Research (AAIR) lab in NYC, and the Innovation Centre in Zug Switzerland
~$450M	Capital raised to date

Recent Updates & New Today

POTENTIAL BEST-IN-CLASS AND POTENTIAL FIRST-IN-CLASS AI DRUG CREATION PIPELINE

- AI drug discovery pipeline of 4 wholly owned assets (3 potential best-in-class and 1 potential first-in-class)
- Biologically and technically highly de-risked portfolio
- Focus on cytokine biology - first frontier of AI-driven drug creation disruption

HIGH VALUE PORTFOLIO WITH RAPID PROGRESS TO VALUE INFLECTION POINTS

- Assets strategically developed to create significant value inflection in early clinical trials (i.e. proof-of-mechanism in Ph1 trial)
- Each of the 4 named assets has potential to reach IND filing stage in 2025 with first in early 2025
- 4 AI generated programs with blockbuster potential

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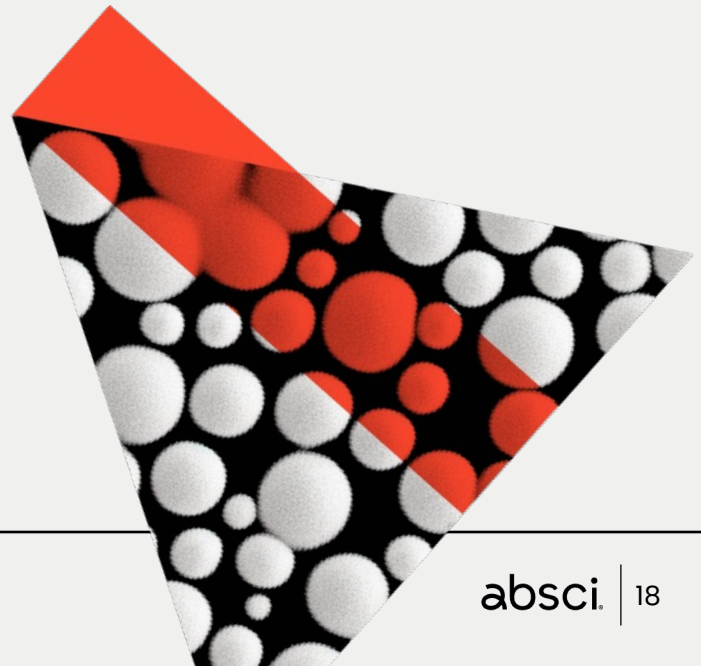
```

Business Updates

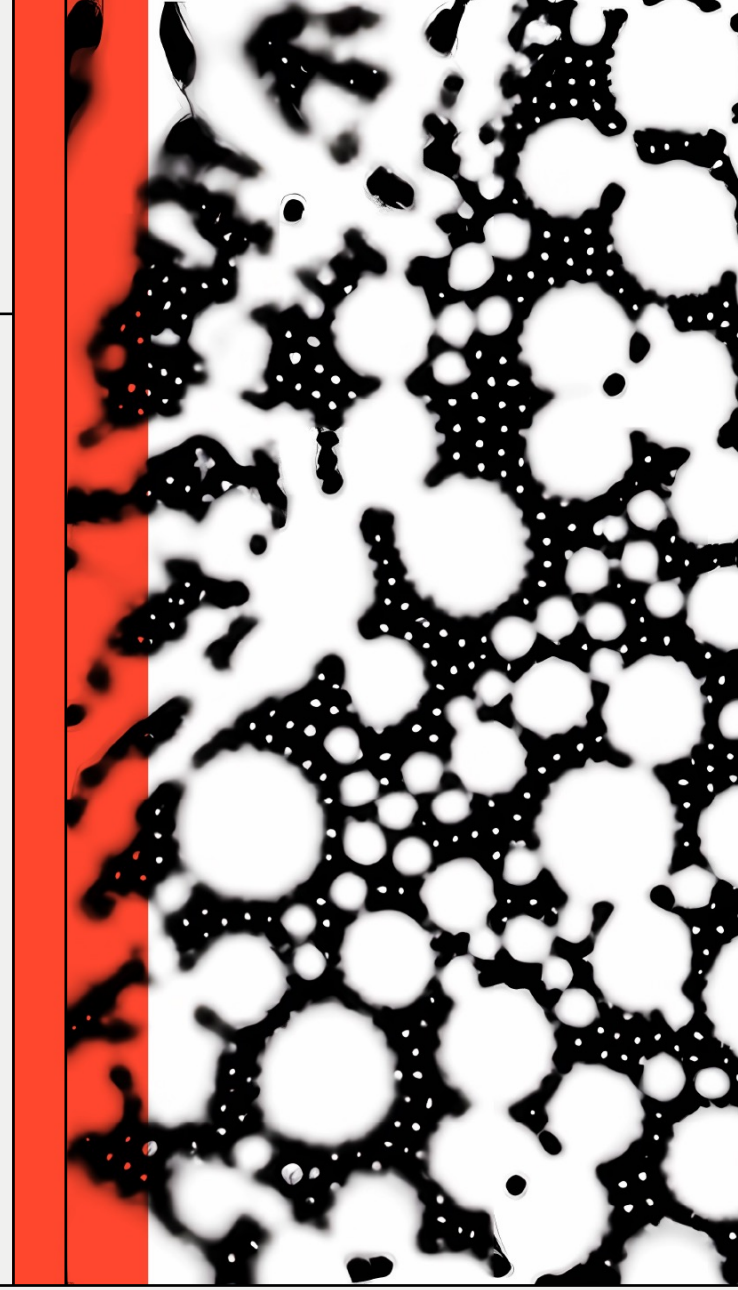
Zach Jonasson, PhD

Chief Financial Officer & Chief Business Officer



Topics

01	Organizational Highlights
02	Facilities & Infrastructure
03	Efficiency Gains
04	Business Evolution
05	Shareholder Catalysts



Professional Background

ZACH JONASSON, PH.D., Chief Financial Officer & Chief Business Officer

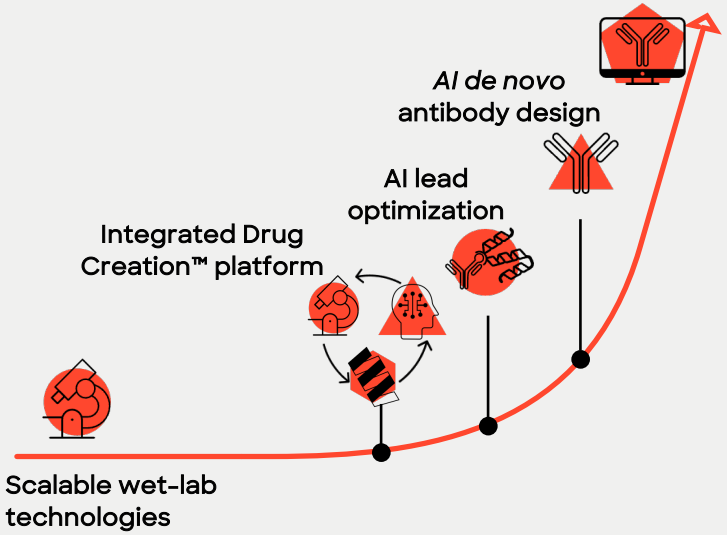
- Chairperson of Absci Board of Directors, 2016-January 2021, Chair of NCGC, 2021-2023.
- Co-founder and former Managing General Partner of PVP and Convergent Ventures; raised four venture investment funds, led the life science investment strategy for both firms, and served as board member for multiple companies.
- CEO and co-founder of Comera Life Sciences. Built the company from the concept stage and established multiple collaborations with large pharmaceutical companies.
- Kauffman Fellow and General Partner, Seaflower Ventures
- PhD, Sackler Scholar, Harvard University

Why Absci?

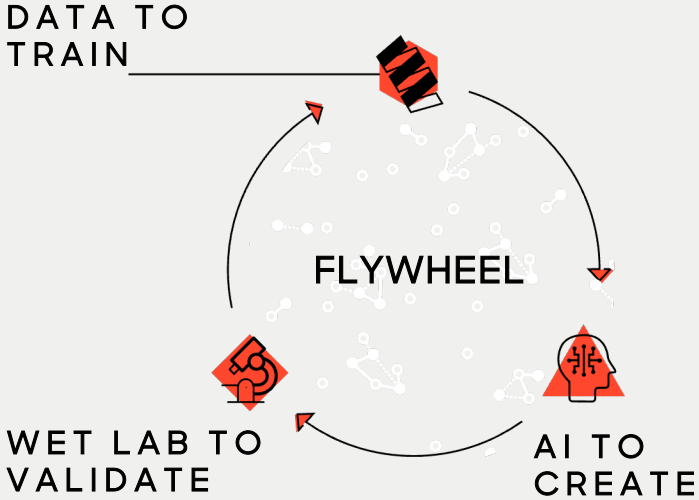
The opportunity to be part of the world class team scaling AI for the benefit of patients

Believe in the impossible

Team + Culture



Pace of Innovation



Integrated Data Engine
Powering AI

Organizational highlights

DRUG CREATION

Key leadership additions to the Innovation team over the last 13 months position Absci for developing successful internal programs



BAYER Shire CSL Vifor Takeda

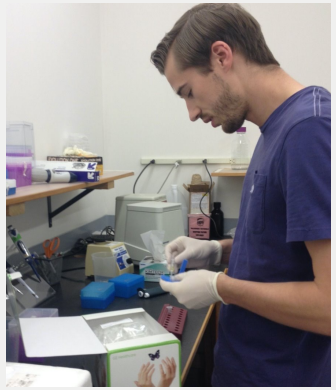
AI

Addition of Chief AI Officer with experience commercializing AI and scaling AI teams positions Absci for scaling up its AI platform
H-index 48; 18,796 citations

Harvard University Broad Institute Nabla Bio PathAI

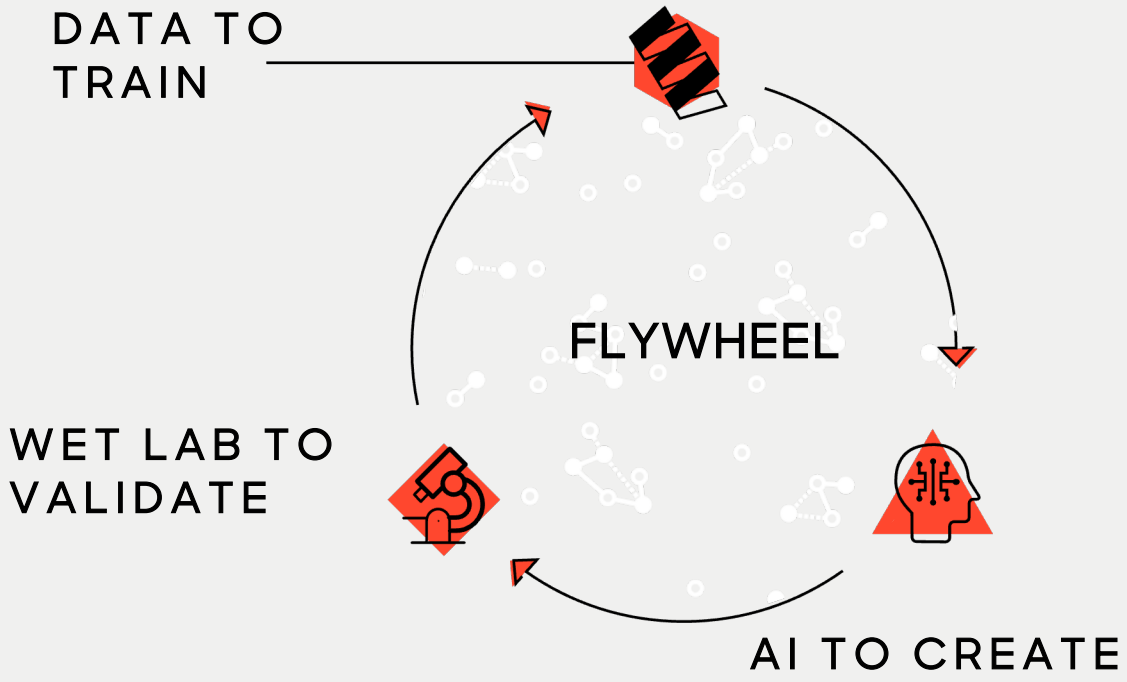
State-of-the-Art Facilities & Infrastructure

From humble origins
in a basement lab…to



- State-of-the-art 77,000 square foot drug creation and wet lab space in Vancouver, WA
- AI Research (AAIR) lab in NYC
- Supported by collaboration with NVIDIA to scale and refine models for AI drug creation
  - Enabled by supercomputer, independently-owned cluster
- Innovation Centre in Zug, Switzerland

Improving efficiency

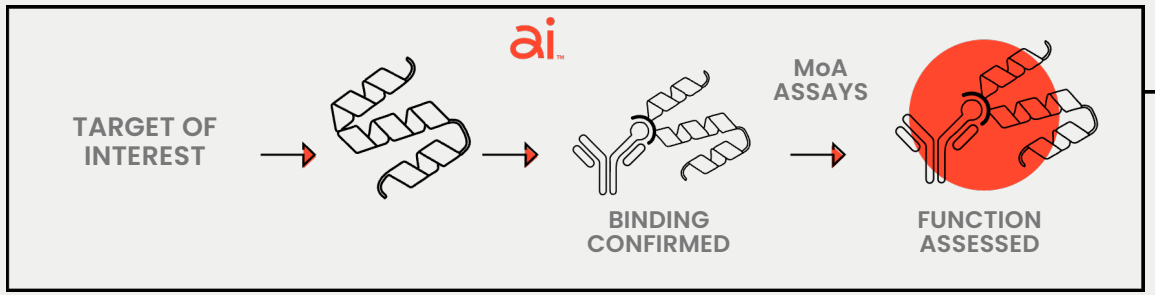


- Estimated 17% improvements in R&D workflow efficiencies from our AI platform + wet-lab integrations over past year
- Reduced gross spending this year while increasing number of programs, including internal program development
- Expect to continue realizing operational efficiencies as our AI improves and as we further improve our AI + wet-lab integration

Integrated Drug Creation™ platform process

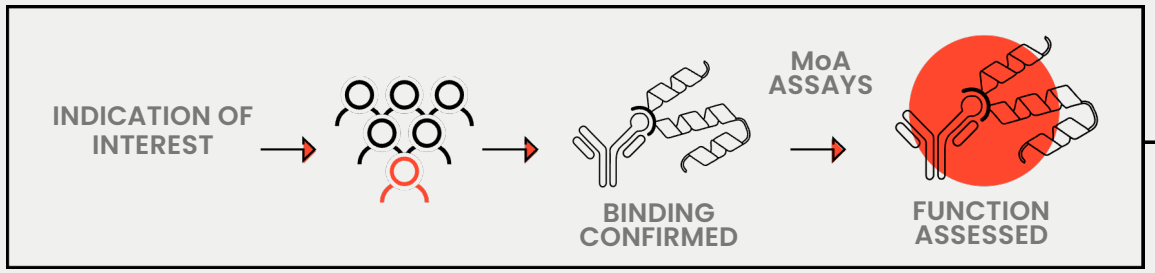
Target based approach (Antibody discovery through AI Design)

TARGET -> LEAD



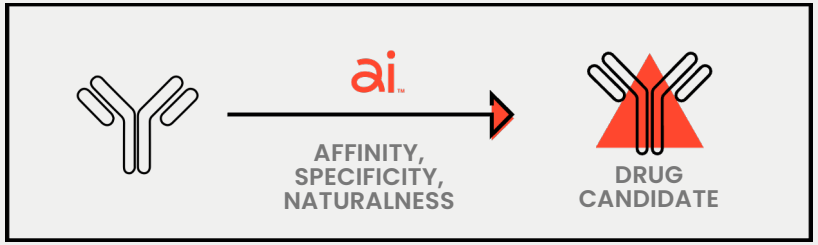
Reverse Immunology approach (Target and antibody discovery)

PATIENTS -> LEAD -> TARGET



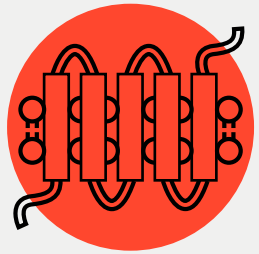
AI-driven lead optimization

LEAD -> MULTI-PARAMETRIC OPTIMIZATION -> DRUG CANDIDATE



Potential to unlock new and differentiated value drivers

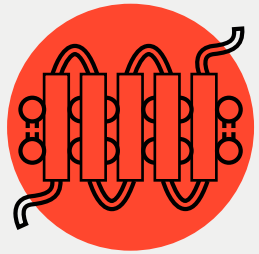
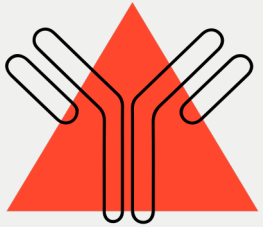
ACCESS NOVEL DISEASE BIOLOGY



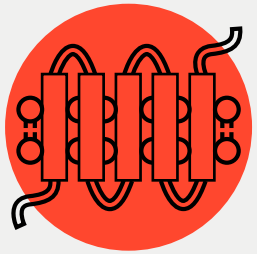
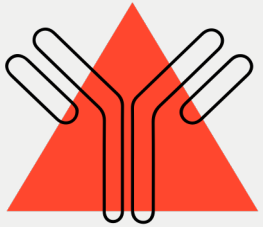
Ability to address elusive drug targets, e.g. GPCRs, Ion Channels

Enabling First-in-Class

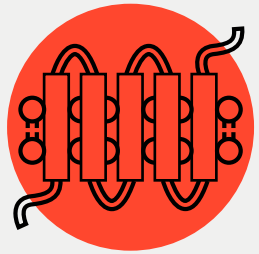
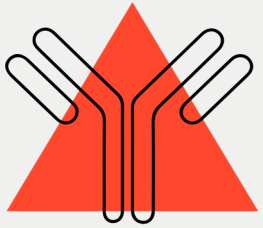
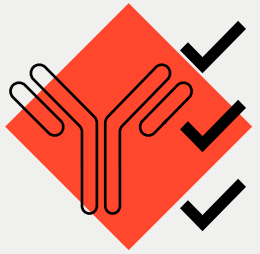
Potential to unlock new and differentiated value drivers

ACCESS NOVEL DISEASE BIOLOGY	SUPERIOR DRUG ATTRIBUTES
	
Ability to address elusive drug targets, e.g. GPCRs, Ion Channels	Multi-valent biologics, Increased half-life, Conditional pH dependent binding
Enabling First-in-Class	Enabling Best-in-Class

Potential to unlock new and differentiated value drivers

ACCESS NOVEL DISEASE BIOLOGY	SUPERIOR DRUG ATTRIBUTES	REDUCED TIME TO CLINIC
		
Ability to address elusive drug targets, e.g. GPCRs, Ion Channels	Multi-valent biologics, Increased half-life, Conditional pH dependent binding	Drug creation process significantly shortened
Enabling First-in-Class	Enabling Best-in-Class	Faster Time to IND

Potential to unlock new and differentiated value drivers

ACCESS NOVEL DISEASE BIOLOGY	SUPERIOR DRUG ATTRIBUTES	REDUCED TIME TO CLINIC	INCREASED PROBABILITY OF SUCCESS
			
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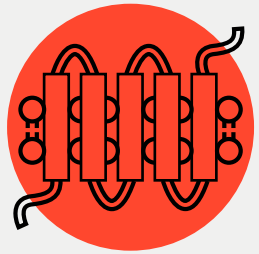
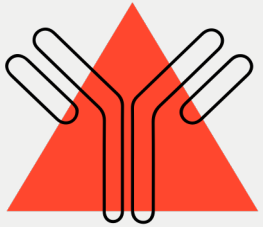
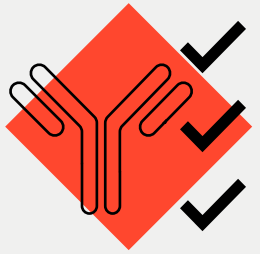
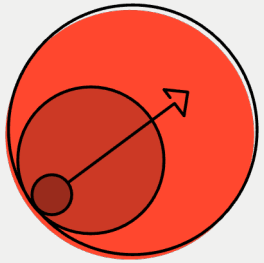
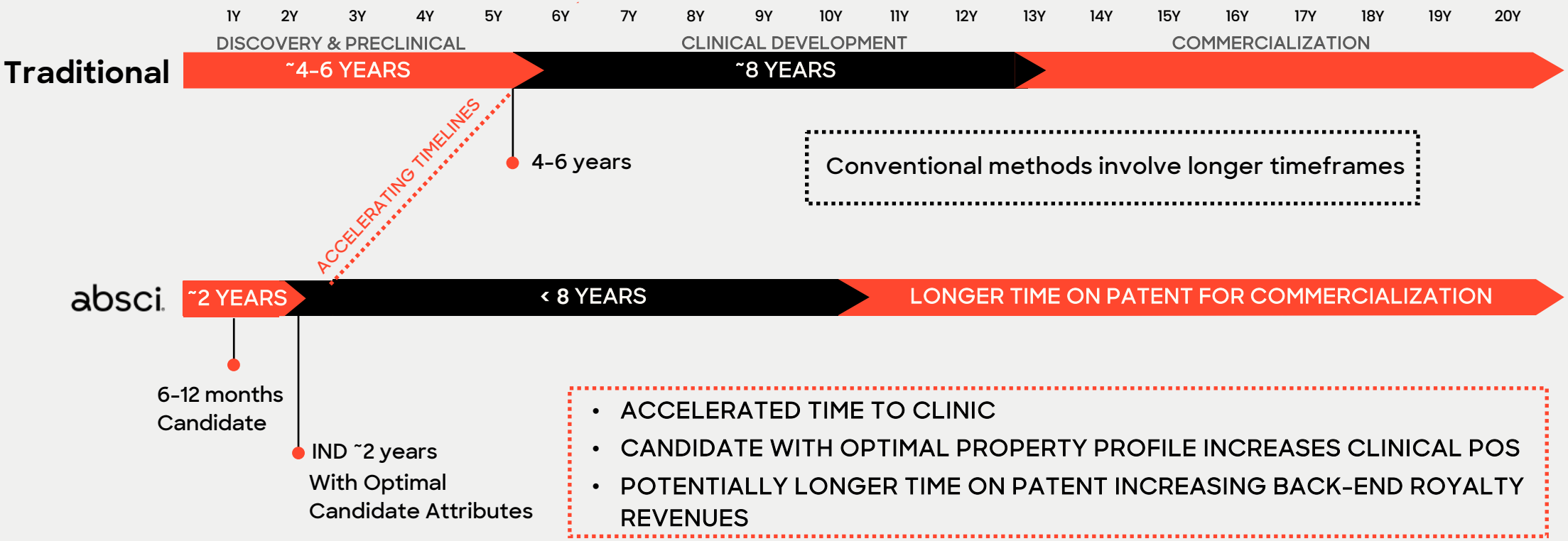
Enabling First-in-Class	Enabling Best-in-Class	Faster Time to IND	Higher Program NPVs

Potential to unlock new and differentiated value drivers

ACCESS NOVEL DISEASE BIOLOGY	SUPERIOR DRUG ATTRIBUTES	REDUCED TIME TO CLINIC	INCREASED PROBABILITY OF SUCCESS	EXPANDED INTELLECTUAL PROPERTY SPACE
				
Ability to address elusive drug targets, e.g. GPCRs, Ion Channels	Multi-valent biologics, Increased half-life, Conditional pH dependent binding	Drug creation process significantly shortened	Multidimensional optimization creates higher quality biologics	AI-drug creation generates broader IP for First-in-Class and finds new IP for Fast Follower/Best-in-Class
Enabling First-in-Class	Enabling Best-in-Class	Faster Time to IND	Higher Program NPVs	Defense + Best-in-Class

Accelerating time to clinic while increasing probability of success

Better biologics for patients, faster

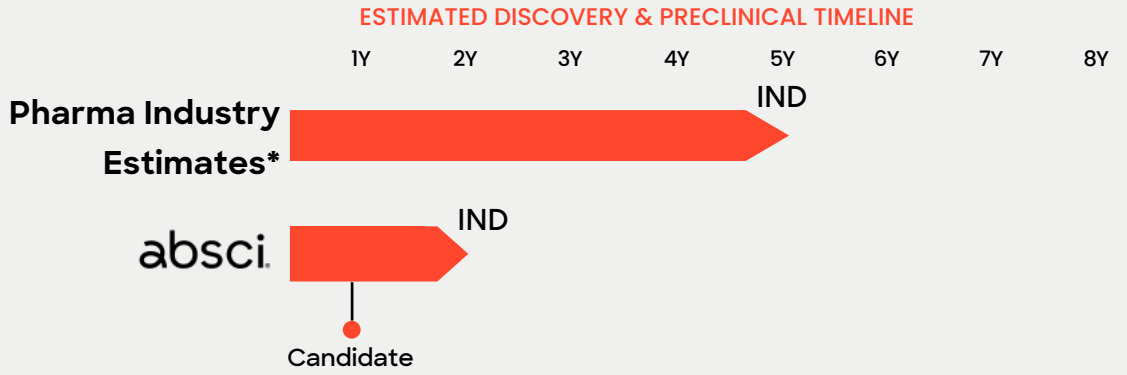


Ultra-Efficient IND Generation

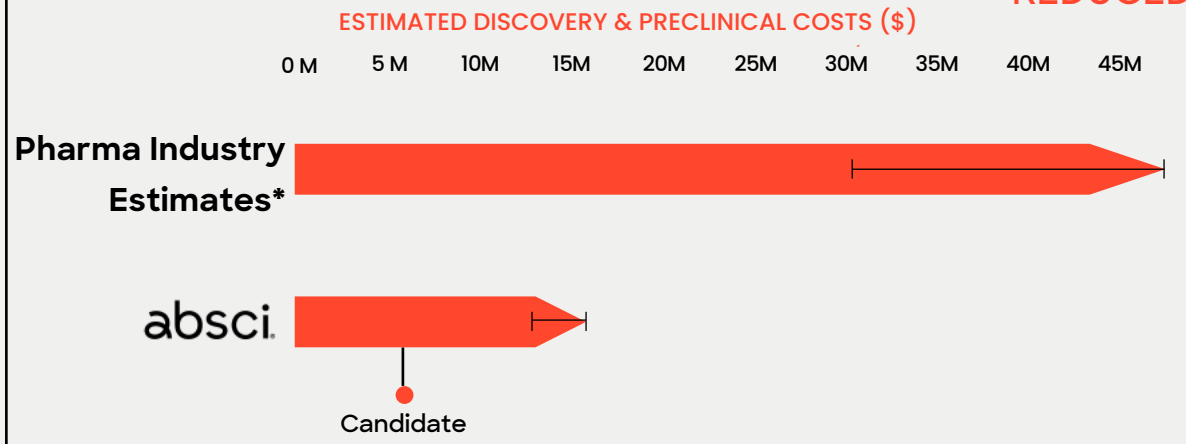
Leverage AI Drug Creation Platform to:

- Design First-in-Class and Best-in-Class programs
- Exploit Speed Advantage
  (2 years to IND vs. 4-6 years for industry)
  more programs per unit time
- Exploit Cost Advantages
  ($14-16M to IND vs. $30-50M
  for industry)
  more programs per unit cost

ENHANCED SPEED

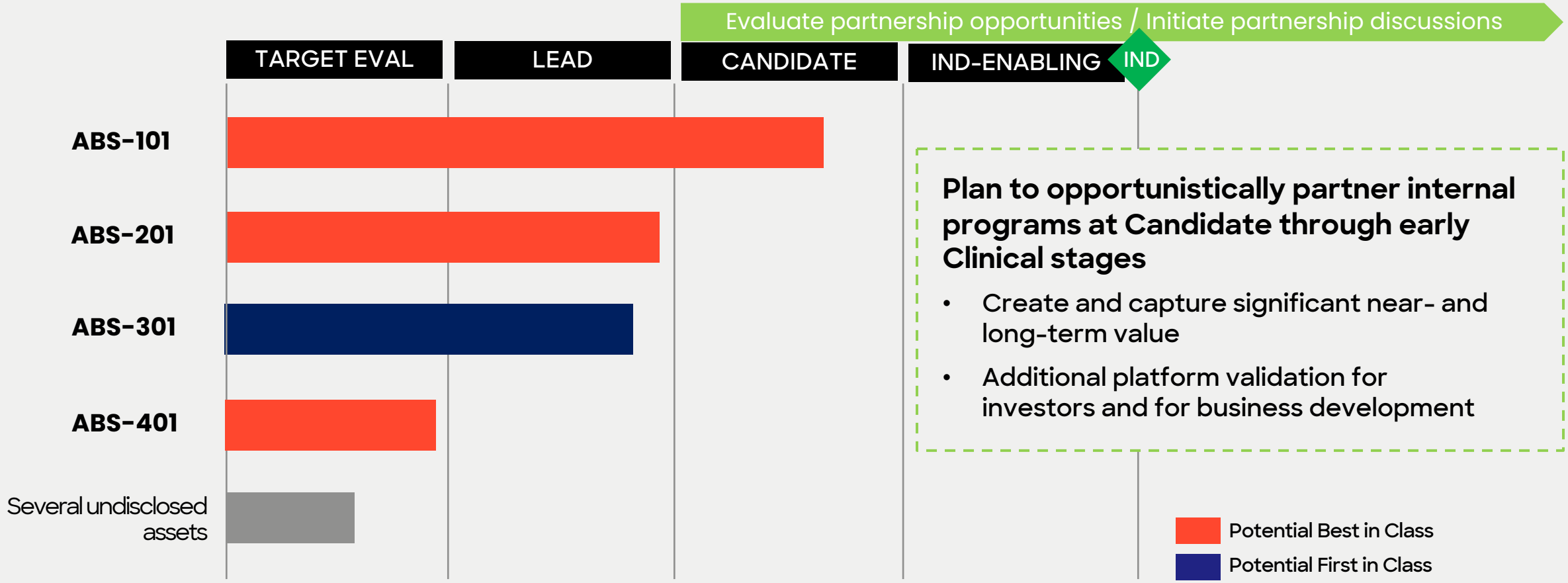


REDUCED COST



Sources: Unlocking the potential of AI in drug discovery Wellcome Trust & BCG, 2023; Van der Schans, et al., 2022; Young et al., 2018, How to improve R&D productivity: the pharmaceutical industry's grand challenge, Paul et al., 2010; Estimate does not include capitalization costs or assumed failure rate costs; the wide range reflects variability in discovery-to-candidate phase

We are leveraging our AI platform advantages to create internal programs



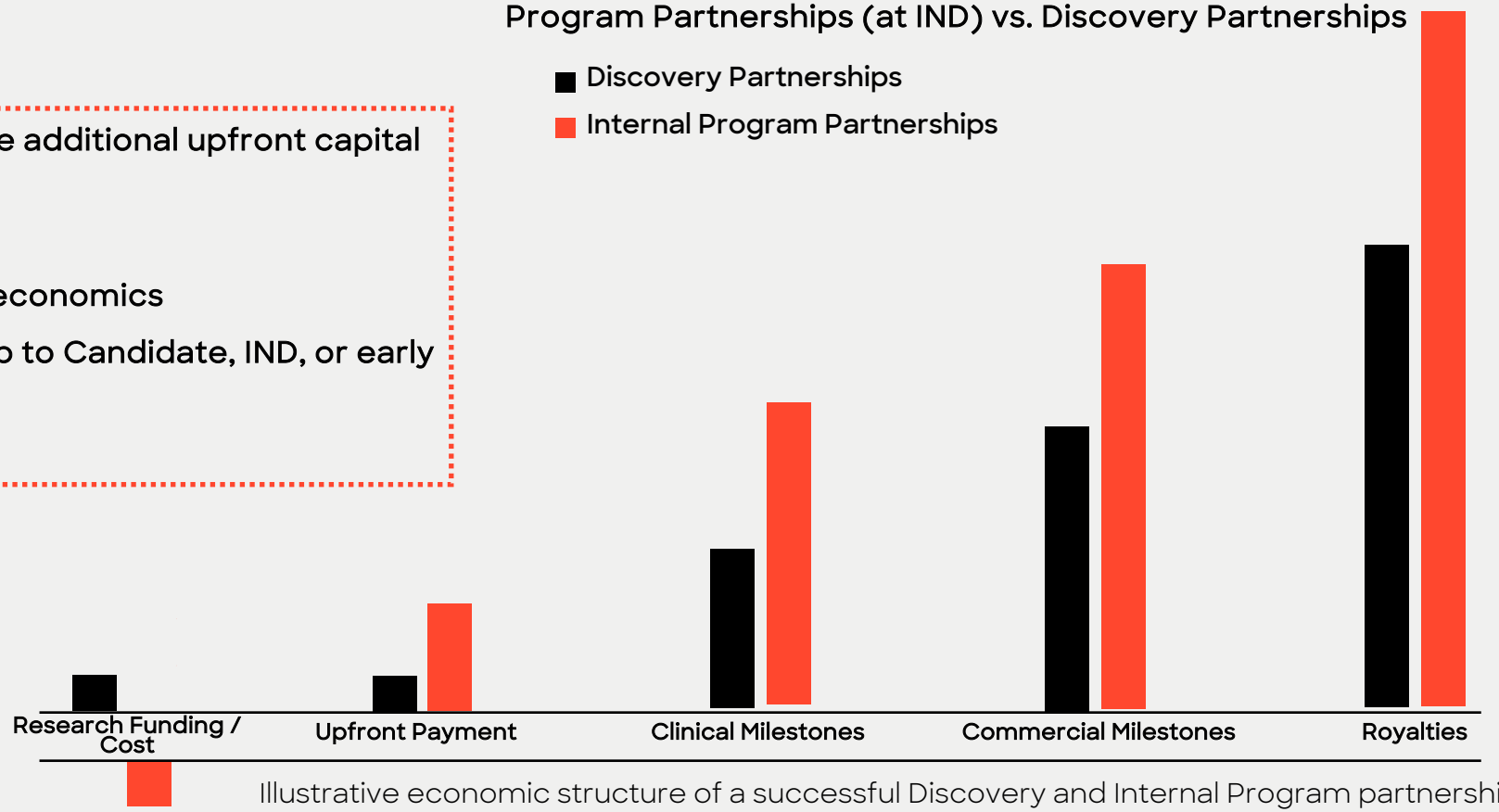
Internal program partnerships have attractive risk-return profiles

- Internal programs require additional upfront capital investment

but offer

- Larger partnership deal economics
- More optionality (develop to Candidate, IND, or early clinical)
- Greater NPV

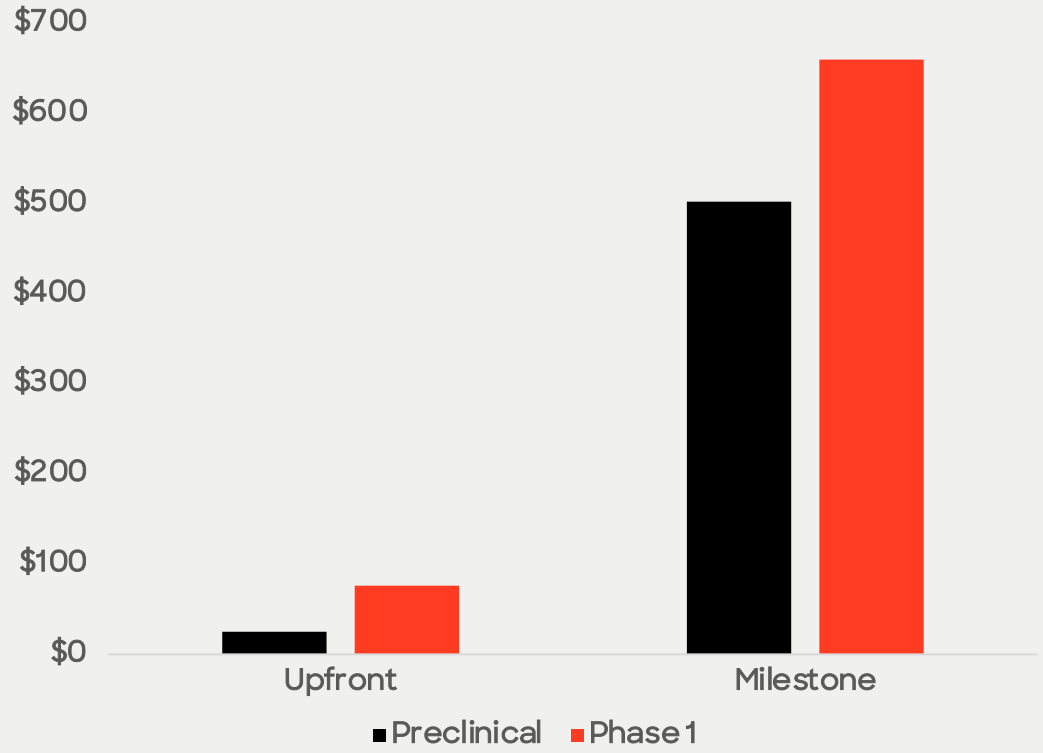
Illustrative-only comparison of deal terms for Internal Program Partnerships (at IND) vs. Discovery Partnerships



Illustrative economic structure of a successful Discovery and Internal Program partnership

Recent data illustrate increase in deal economics associated with additional internal development

Upfront and Milestone Payments for Biologics Programs Partnered at Preclinical (primarily Candidate + IND stages) vs. Phase 1



Source: Analysis of oncology and immunology partnership announcements and associated regulatory filings between January 2021 and September 30, 2023

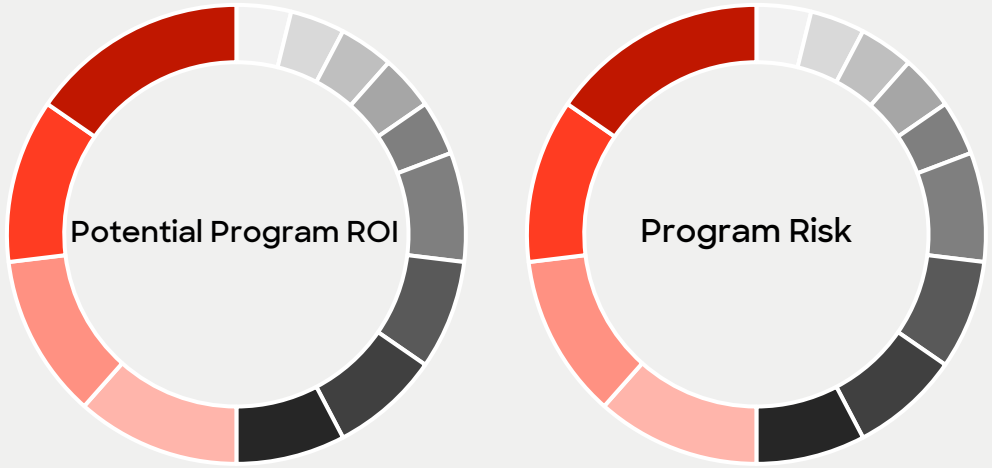
- Recent industry data indicate a significant increase in deal economics associated with Phase 1 vs. Pre-clinical phase
- Discovery phase is not broken out in most deal announcements, but limited data show a significant increase in deal economics for Candidate and IND phase vs. Discovery phase.

Potential to create more value with additional development of select internal programs

Business Model Evolution

Developing a Diversified Portfolio of Drug Creation + Internal Program Partnerships

Diversified Portfolio of Partnered Programs
(Internal Program + Drug Creation Programs)



Illustrative Portfolio Diversified by Risk and Potential ROI

Diversified Portfolio of Therapeutic Programs

- Drug Creation Partnerships:
  - R&D and upfront funding
  - Broader set of indications
  - Lower relative downstream milestones and royalties
  - Less control
- Internal Program Partnerships:
  - Require upfront cost/investment
  - Development partner not locked in at start
  - Higher downstream milestones and royalties
  - More optionality
  - Focused set of indications

Strategy to grow and diversify our portfolio of partnerships

Metrics

4

Internal Programs Announced Today

- Target First-in-Class
- Target Best-in-Class
- Target Best-in-Class
- Target Best-in-Class
- Initiating Several Additional Undisclosed Assets

10

New Active Programs projected this year

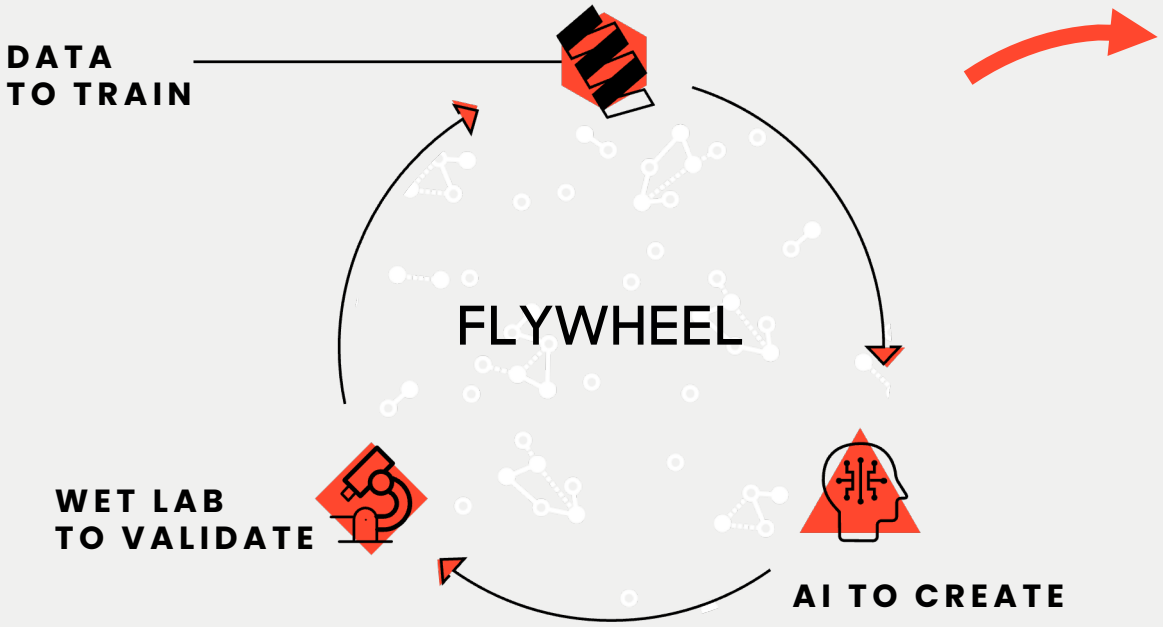
Strong pipeline of interest in our AI Drug Creation Platform

17%

Estimated improvements in R&D workflow efficiencies over past year

Continuing to focus investments and operations on strategic initiatives and near-term inflection points, providing cash and cash equivalents and short-term investments into late 2025

What's next



Near- and mid-term value drivers

- Increases in the efficiency and capability of our AI Drug Creation and Optimization Platforms
- New Drug Creation and Internal Program Partnerships
- Advancement of existing Drug Creation Partnerships + Internal Programs
- New Internal Programs

```
absci_library import codon_optimizer
ary
odon_optimizer.reverse_translate(library)
ary.to_csv("covid-antibody-designs.csv")
ary.to_wet_lab(assay="ACE")
```

```
from absci import lead_opt_model
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library.naturalness =
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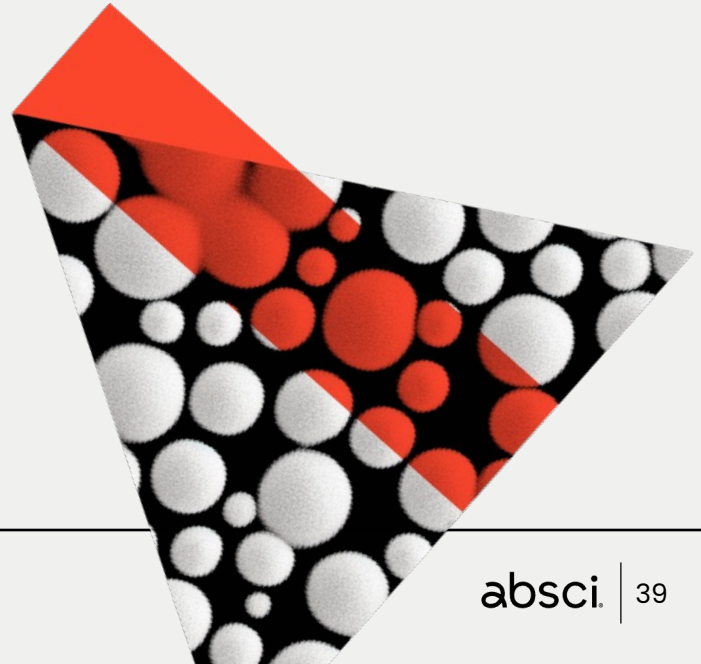
lead_optimizer.optimize(library).to_wet_l
say="SPR")
```

Innovation

Andreas Busch, PhD

Chief Innovation Officer



Professional Background

ANDREAS BUSCH, Ph.D., Chief Innovation Officer

- EVP and Head of R&D at Bayer and Shire
- Responsible for R&D portfolio and strategy
- Bringing several blockbusters from bench to approval (e.g, Xarelto, Kerendia, Adempas, Stivarga, Takhzyro, Verquvo) & more still in development
- Several Board of Directors and Scientific Advisory Board roles

Absci Innovation Leadership Team with outstanding track record

INNOVATION LEADERSHIP TEAM

ANDREAS BUSCH, PHD
Chief Innovation Officer

JENS PLASSMEIER, PHD
SVP, Biologics Discovery Technologies

CHRISTINE LEMKE, DVM, MBA
SVP, Portfolio & Growth Strategy

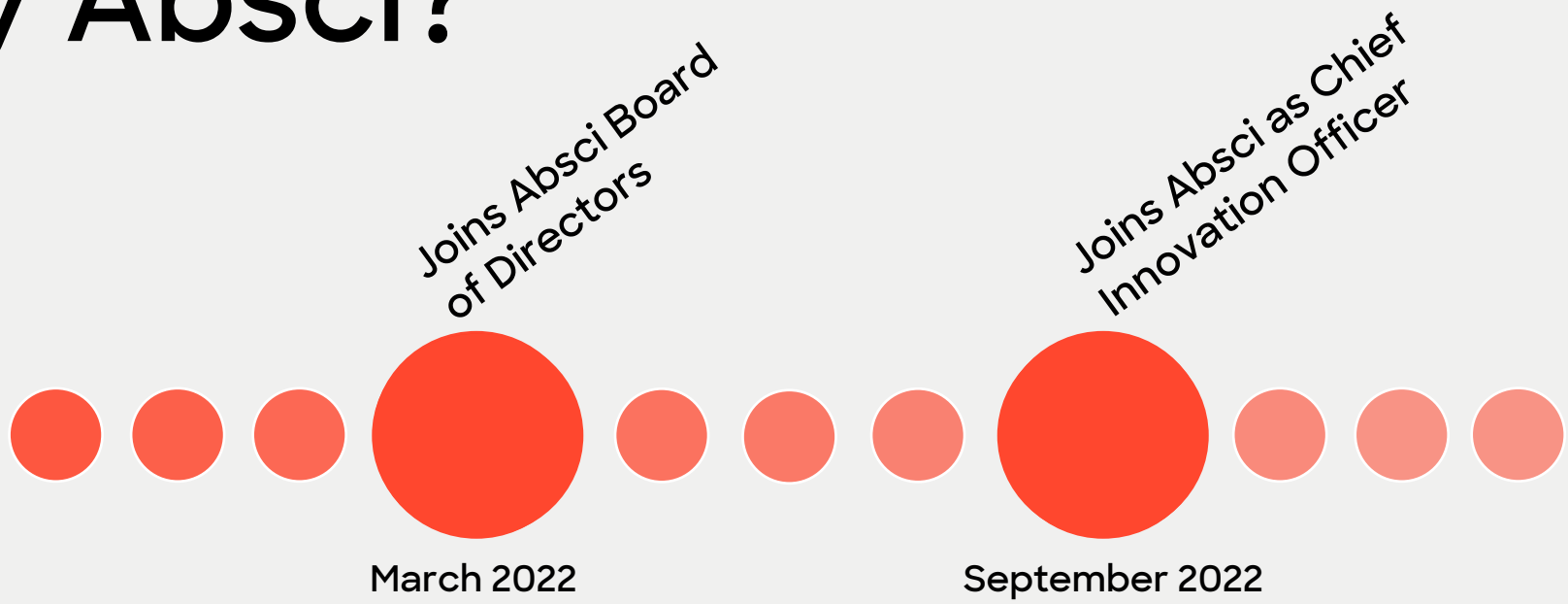
CHRISTIAN STEGMANN, PHD, MBA
SVP, Drug Creation

AMARO TAYLOR-WEINER, PHD
SVP, Chief AI Officer

- >100 years of collective discovery and development experience
- Contribution to numerous breakthrough innovations and blockbuster programs

Speakers Today

Why Absci?



Confidence in the ultimate impact of AI on drug discovery and development	Absci optimally addresses past weaknesses (quality and quantity of data)	Absci's disruptive potential because of fully integrated wet lab and AI capabilities	Rapid progress in AI-driven drug development in the last 12 months	Opportunity to leverage superior technologies for both value-added partnerships and internal drug development portfolio

Capability Overview: The leading AI platform for AI biologics drug creation

Leverage deep disease insights with novel approaches

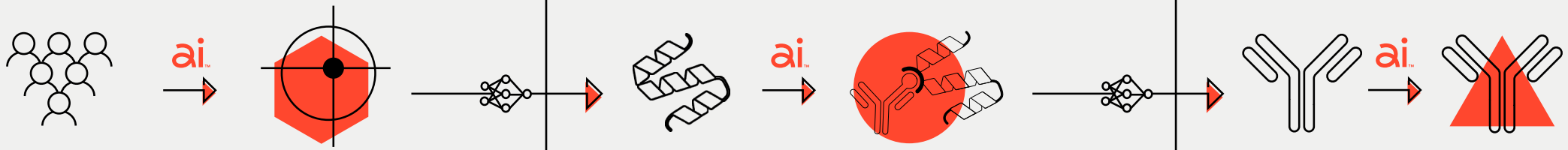
Reverse Immunology for target discovery

AI-guided antibody drug creation

Biologics at a click of a button

AI guided antibody optimization

Multi-dimensionally optimized antibodies



HYBRID BUSINESS MODEL

Partnerships

Internal Pipeline

Today's focus: AI Platform and Internal Drug Creation Portfolio

AI PLATFORM

AMARO TAYLOR-WEINER, PHD
SVP, Chief AI Officer

- Tufts, Broad Institute, Harvard
- Extensive cutting-edge protein and AI experience: H-index 48; 18,796 citations
- Scaled & managed teams of > 80 AI scientists and engineers

INTERNAL PIPELINE

CHRISTIAN STEGMANN, PHD, MBA
SVP, Drug Creation

- Max Planck Institute, MIT, Broad Institute, Stanford
- 13 years of experience in large & mid-size pharma
- Track record of leading drug discovery teams and former Head of Research and Non-clinical Dev at CSL Vifor

```
 absci_library import codon_optimizer
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Break

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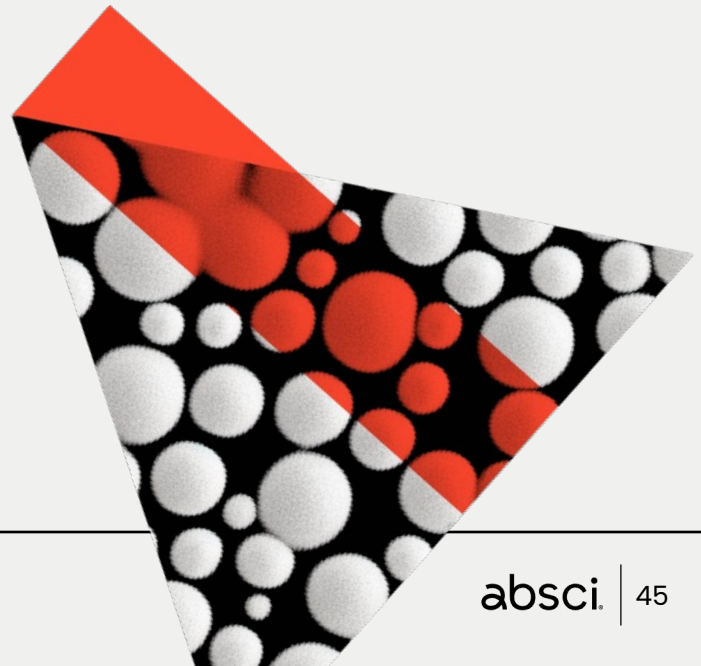

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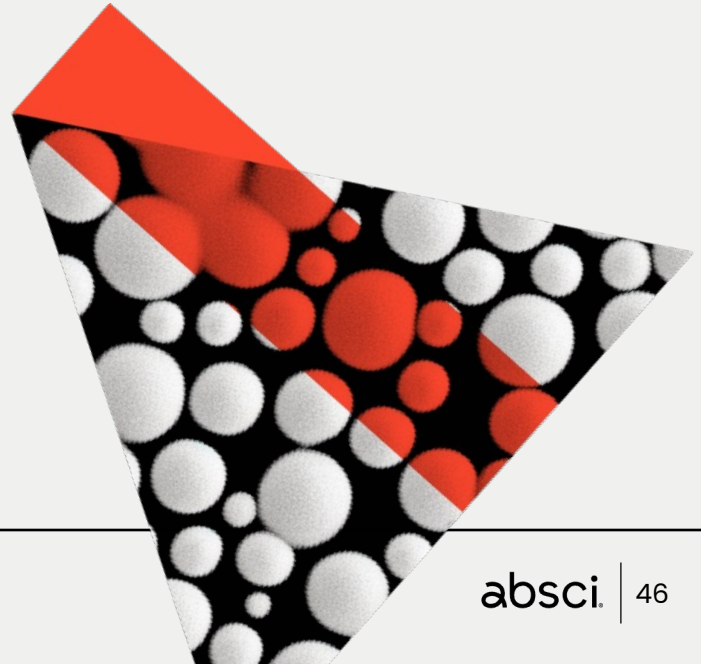
```

Partner Presentation

Jonathan Cohen

VP Applied Research, NVIDIA



Absci R&D Day 2023

Generative AI for Life Sciences

Jonathan Cohen | VP Applied Research

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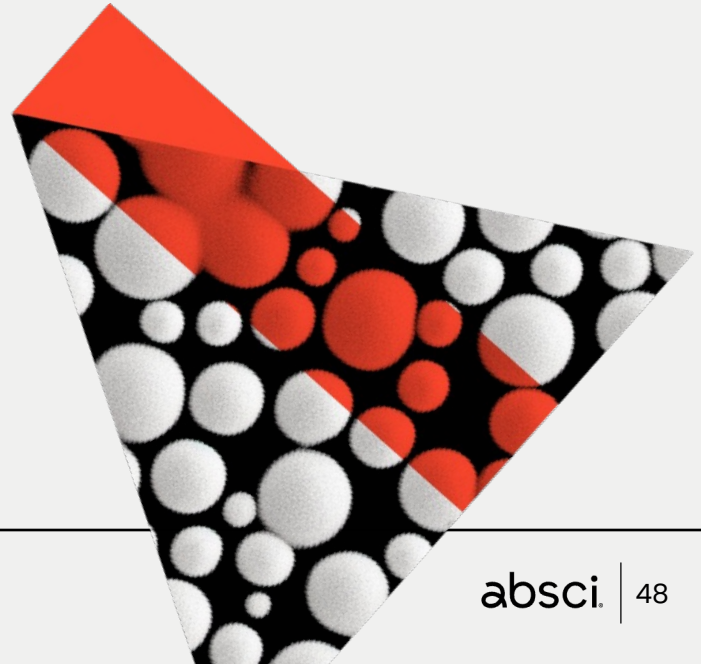
```

AI Platform

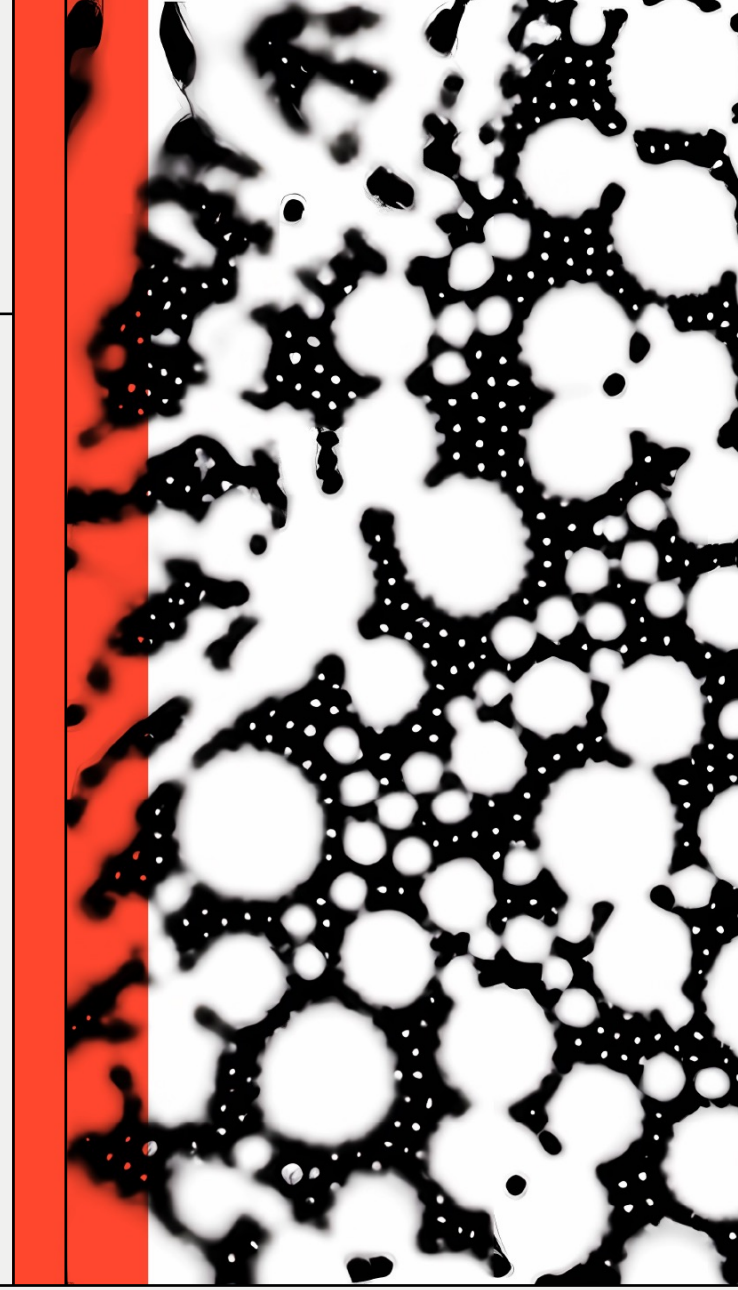
Amaro Taylor-Weiner, PhD

Chief AI Officer



Topics

01	Background & Motivations
02	*De novo* therapeutic antibodies
03	Lead optimization using AI



Professional Background

AMARO TAYLOR-WEINER, Ph.D., Chief AI Officer

- Scientific leader with over 10 years of experience using machine learning to make biological discoveries and improve patient outcomes.
- Experience in interdisciplinary and collaborative organizations leading AI research and engineering with clinical and translational data points.

Broad Institute
Computational Oncology

Harvard University
Biomedical Informatics

Nabla Bio
Antibody Engineering

PathAI
Digital Pathology

Absci
AI Drug Creation

Why Absci?

Building a winning AI team requires:

Differentiated Data Platform

- Proprietary ACE Assay™ platform for rapid and quantitative screening.
- Expertise in assay development tailored for generative AI.
- Rapid cycle times to advance and improve models.

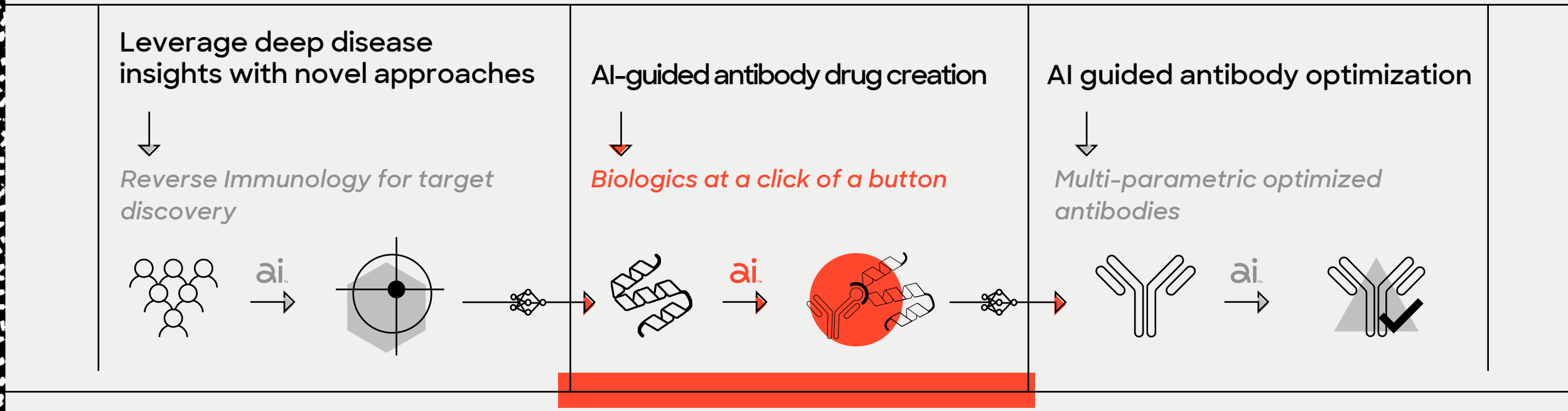
Engineering & Infrastructure

- Pre-built data infrastructure for Synthetic Biology lab.
- Invested in fast AI model iteration & high-throughput bio-data.
- Deep integration between AI and wet-lab.

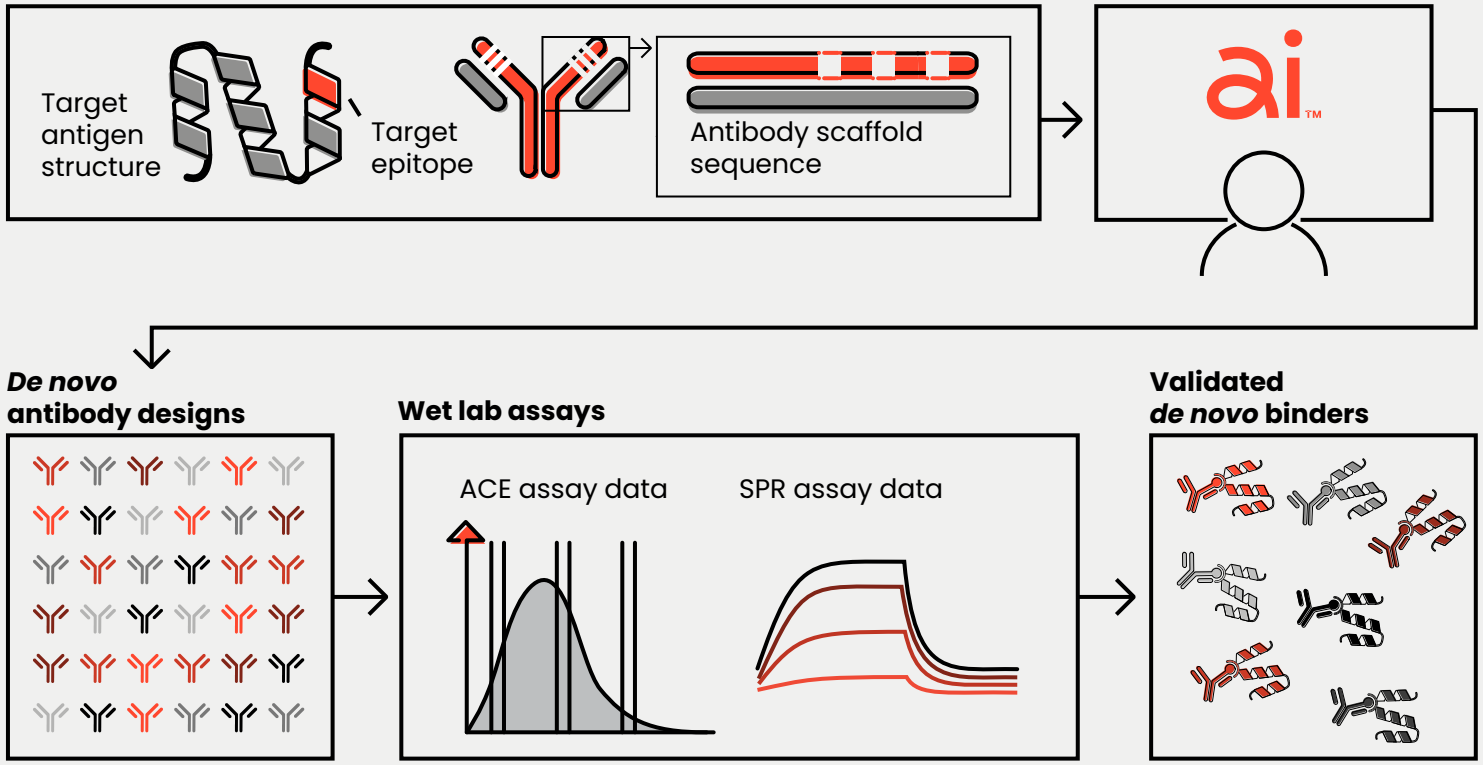
Technical Prowess

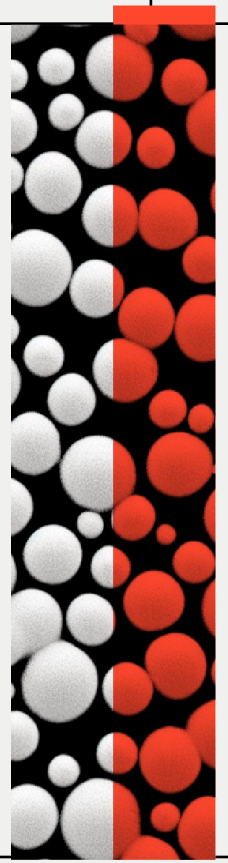
- Built top-tier AI team via acquisitions and hires in 2 years.
- Merged AI scientists with veteran drug creators.

De novo antibody development using generative AI



De novo drug creation with ‘zero-shot’ generative AI





AI *de novo* design of HER2 antibodies

Case study goals

Test ‘zero shot’ model by designing HCDR3 and HCDR123 for HER2 binding

Assess multiple parameters:

- Binding rates
- Sequence diversity
- Immunogenicity
- Functionality
- Developability

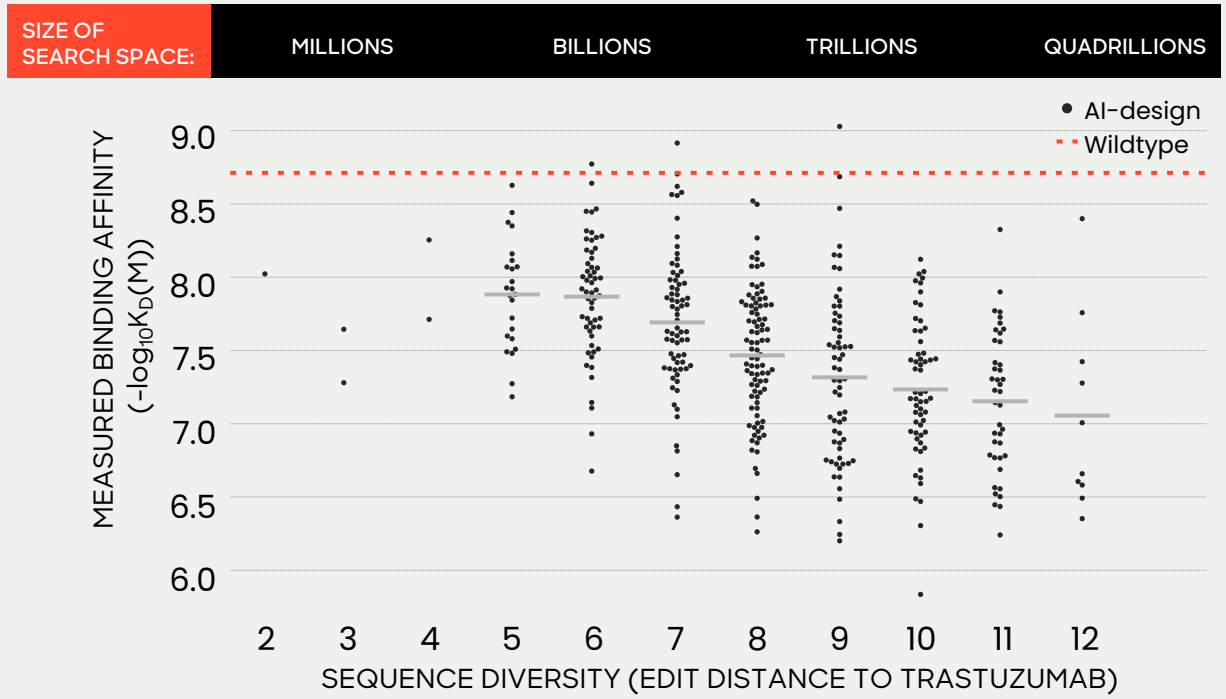
Outcome of AI-guided antibody drug creation

1. Delivers diverse, novel, high affinity binders
2. Maintains high level of specificity
3. Outperforms biological baseline
4. Enables multi-dimensional lead optimization
   - Desired cross-species reactivity and specificity
   - Optimal developability
   - Higher potency than Trastuzumab as demonstrated *in vitro*

Data highlights

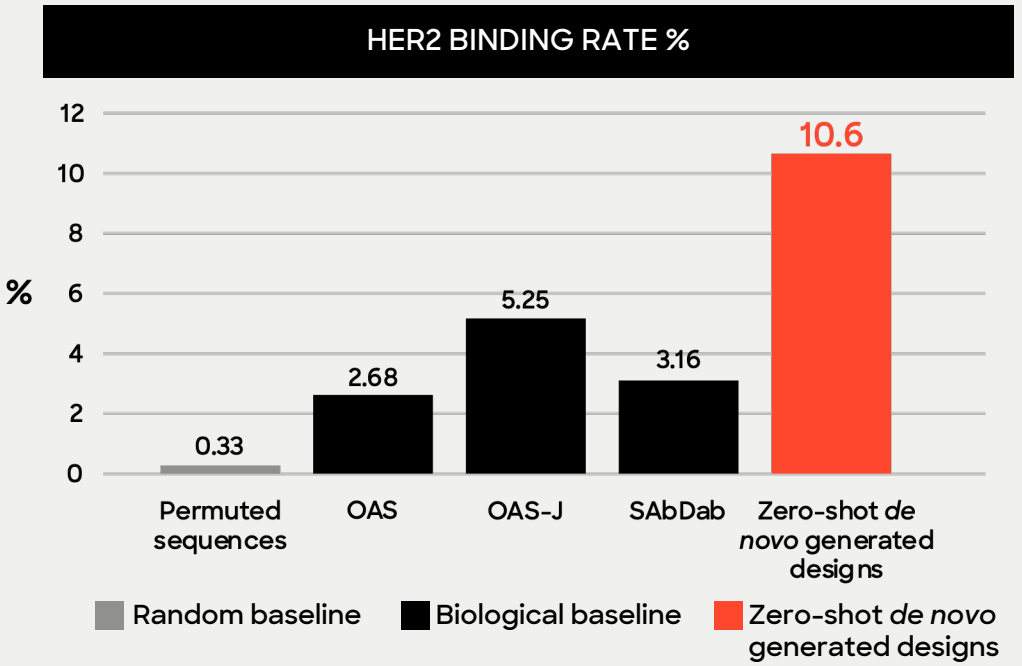
1 Diverse, novel, high affinity binders

- Up to 12 mutations in a CDR region of 13 amino-acids (Search space of 20^{13})



3 Outperforms biological baseline

- *De novo* designed HCDR3s achieve a 4-fold improvement over random OAS baseline



Affinity of novel binders up to 3.4 nM measured by SPR in mAb format

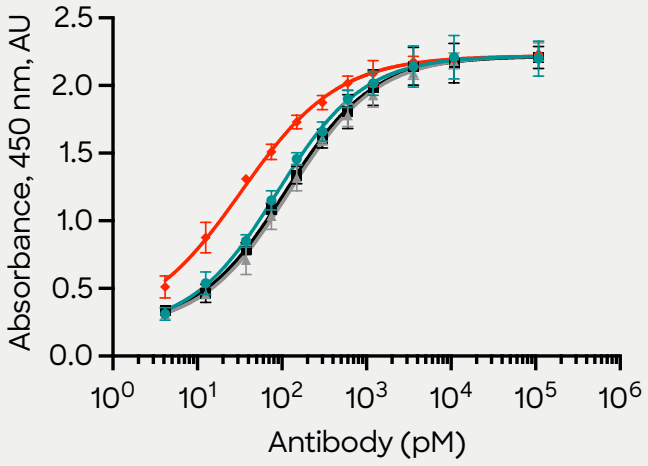
Data highlights

4 Higher or equal potency binders than trastuzumab

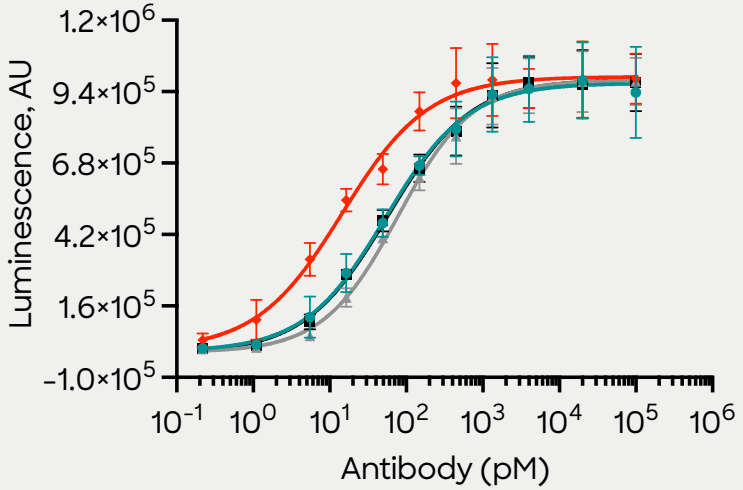
- Verified binders form biologically relevant interactions and possess desired functional attributes

SK-OV-3 (HER2 +ve) cell-based assays

Cell Surface Binding



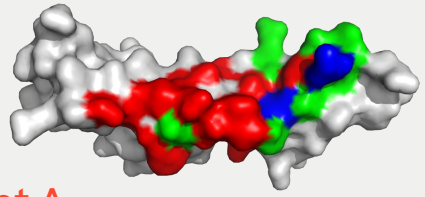
ADCC



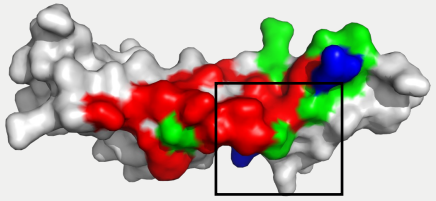
WT trastuzumab
Variant A*
Variant B
Variant C

Epitope mapping

Trastuzumab WT



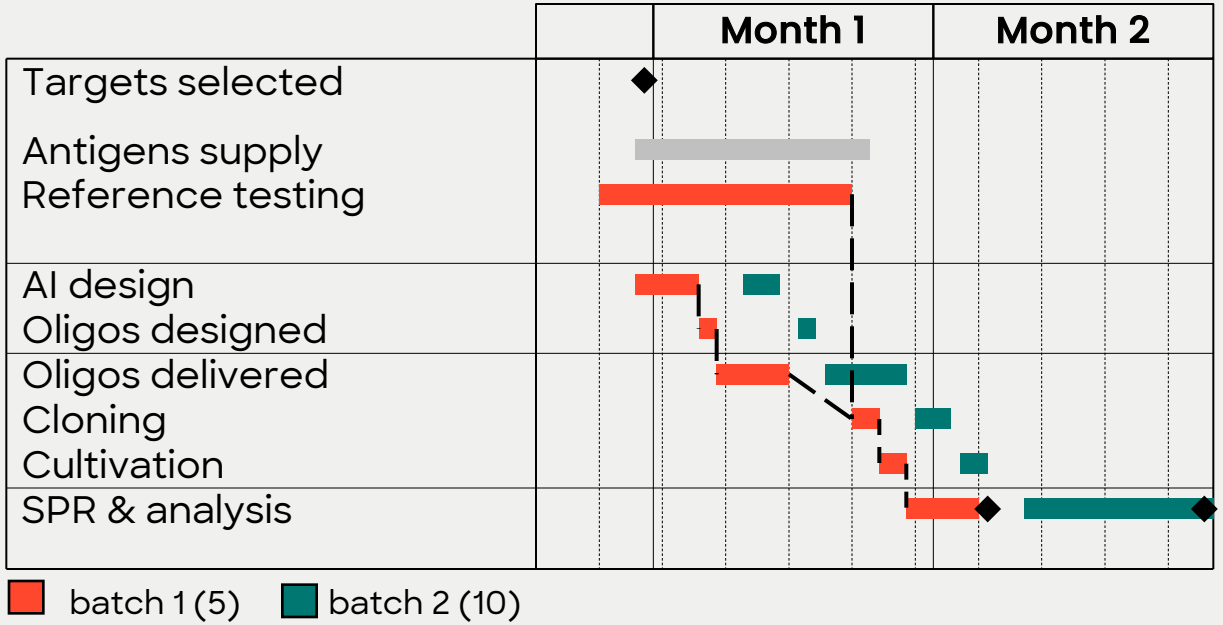
Variant A



Epitope controls potency

Not critical
Partial
Critical

Scaling our *de novo* development with high throughput validation



Successfully scaled wet lab

- Scaled wet lab throughput to test 15 targets in 10 weeks
  - 12/15 targets successfully screened
  - 8/12 validated binders
- Capability to generate diverse datasets quickly powers our innovation pipeline

Leveraging wet lab and AI for multi-parametric lead optimization

Leverage deep disease insights with novel approaches

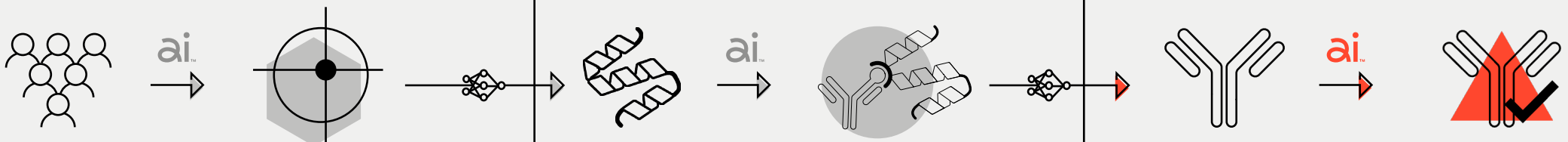
Reverse Immunology for target discovery

AI-guided antibody drug creation

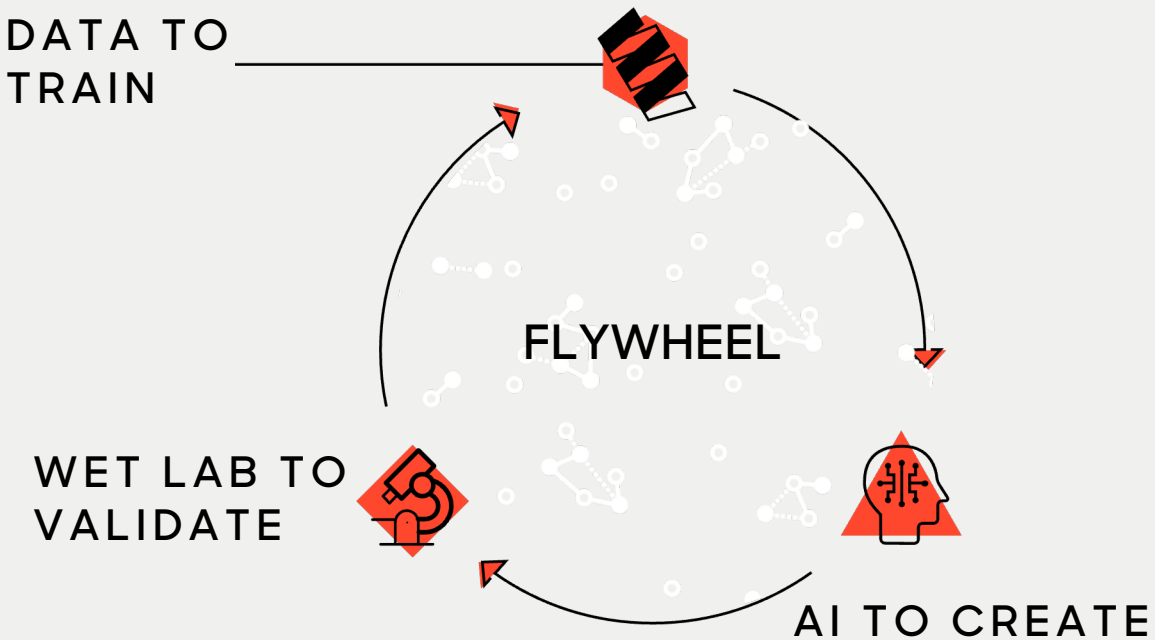
Biologics at a click of a button

AI guided antibody optimization

Multi-parametric optimized antibodies



From *de novo* designs to optimized therapeutics



WET LAB TO TRAIN & VALIDATE

Clone & Express 10^3 – 10^6 CDR variant libraries expressed in SoluPro® strain

VARIANT LIBRARY SCREENING

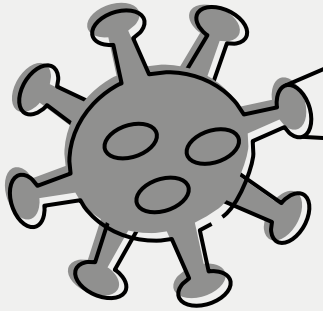
Large libraries
ACE Assay™ platform

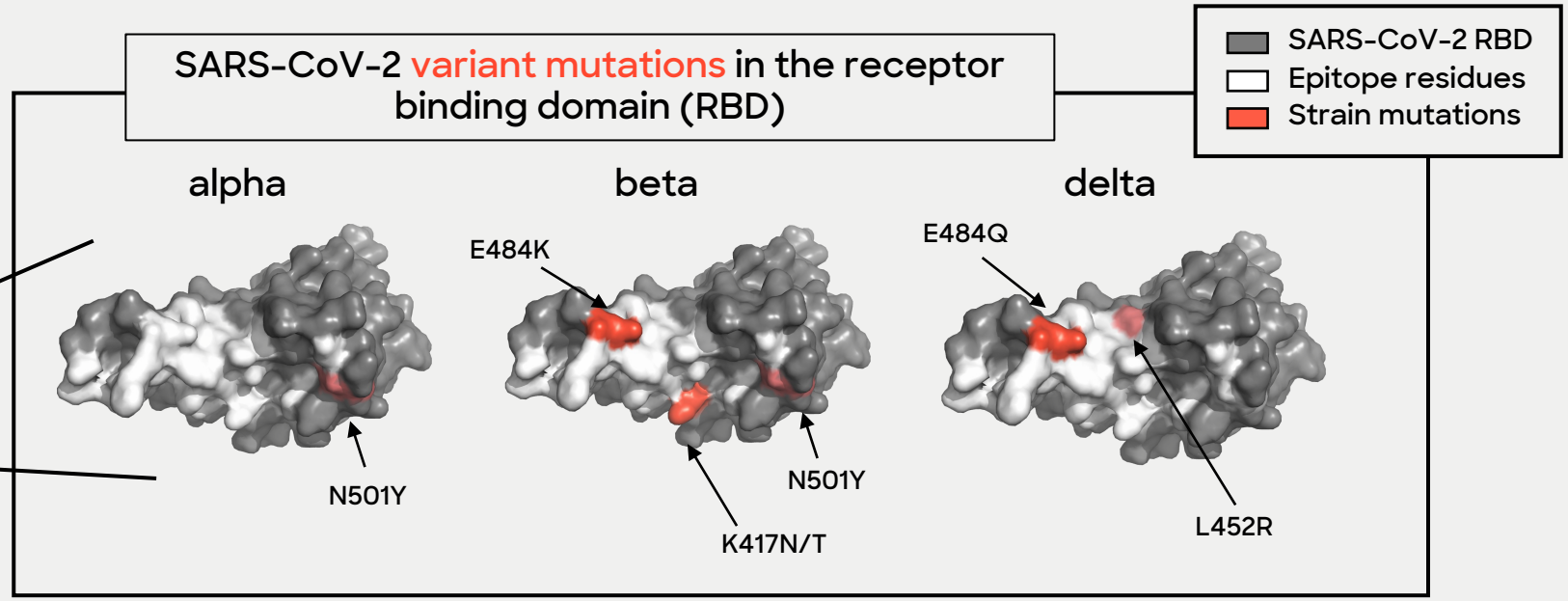
Small libraries
Surface Plasmon Resonance (SPR)

Multi-valent lead co-optimization towards a broad spectrum antibody

Case study goals

Re-engineer clinically approved antibody for binding towards three SARS-CoV-2 variants



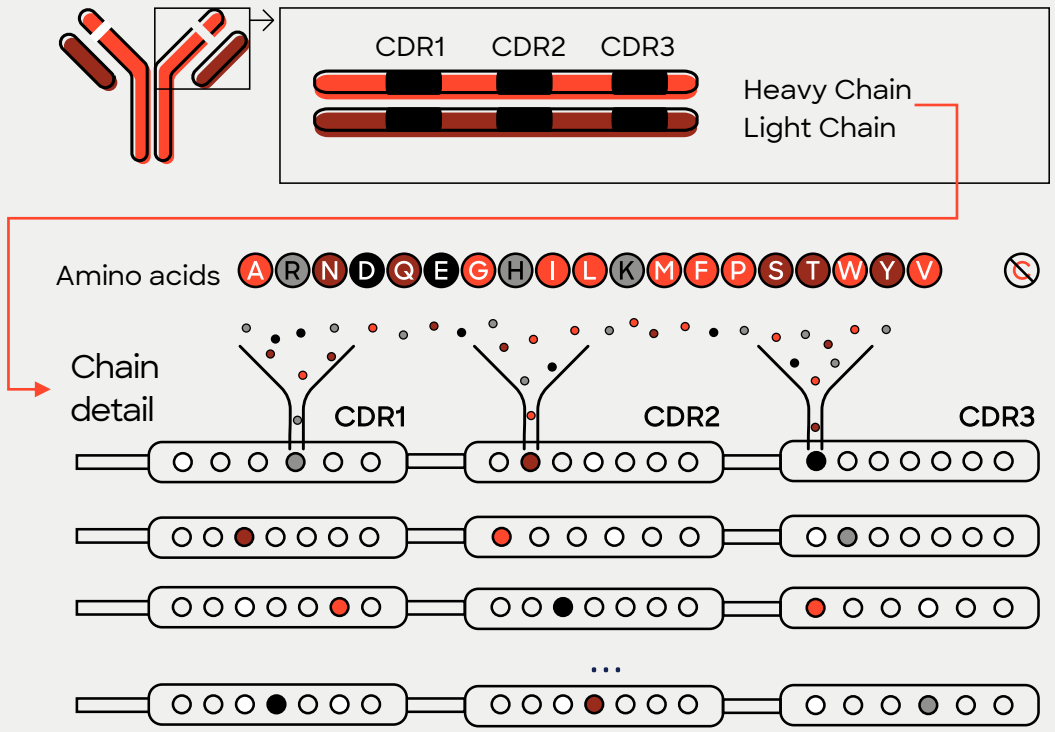


Improve binding towards beta without loss of binding towards alpha and delta

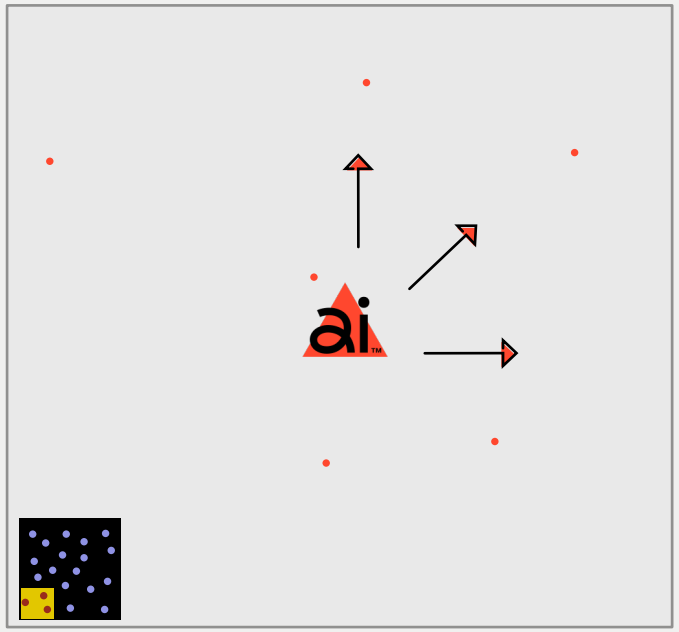
Fab	K_D (nM) WT RBD	alpha RBD	beta RBD	delta RBD
Parental Antibody	8.5	8.0	607	5.4

Generate information rich libraries for model training

1 Generate target-specific training data from triple mutant libraries



2 Model searches up to 48 trillion options and identifies novel high affinity hits



Traditional training sets

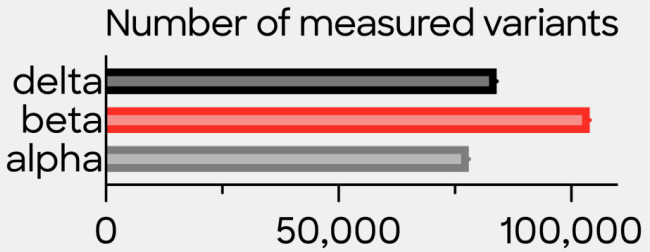
Absci 100k training set in 10^7 combinatorial space

Absci lab confirmed hits in 10^{13} combinatorial space

Absci's ACE Assay™ platform generates large, high quality training sets enabling *in silico* affinity predictions

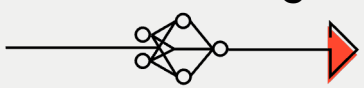
1

>75k ACE assay data points per training set

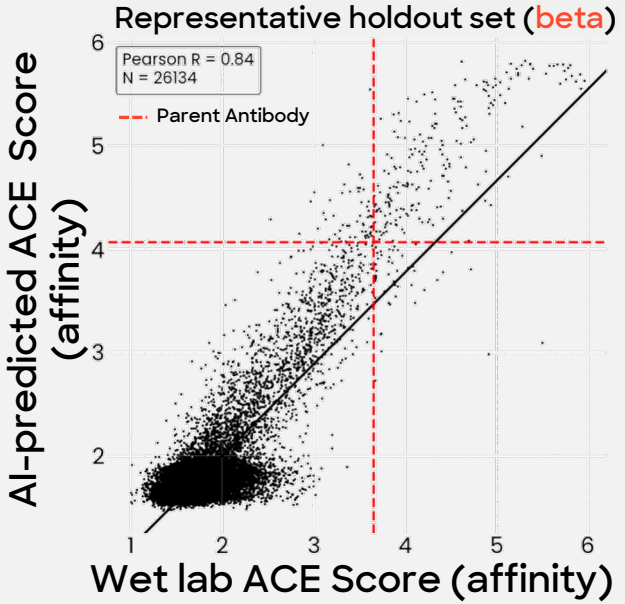


2

Model training



Hold out data sets demonstrate strong model performance following training with AI-predicted affinity correlating well with experimental measurements



Pearson R

alpha	beta	delta
0.75	0.84	0.78

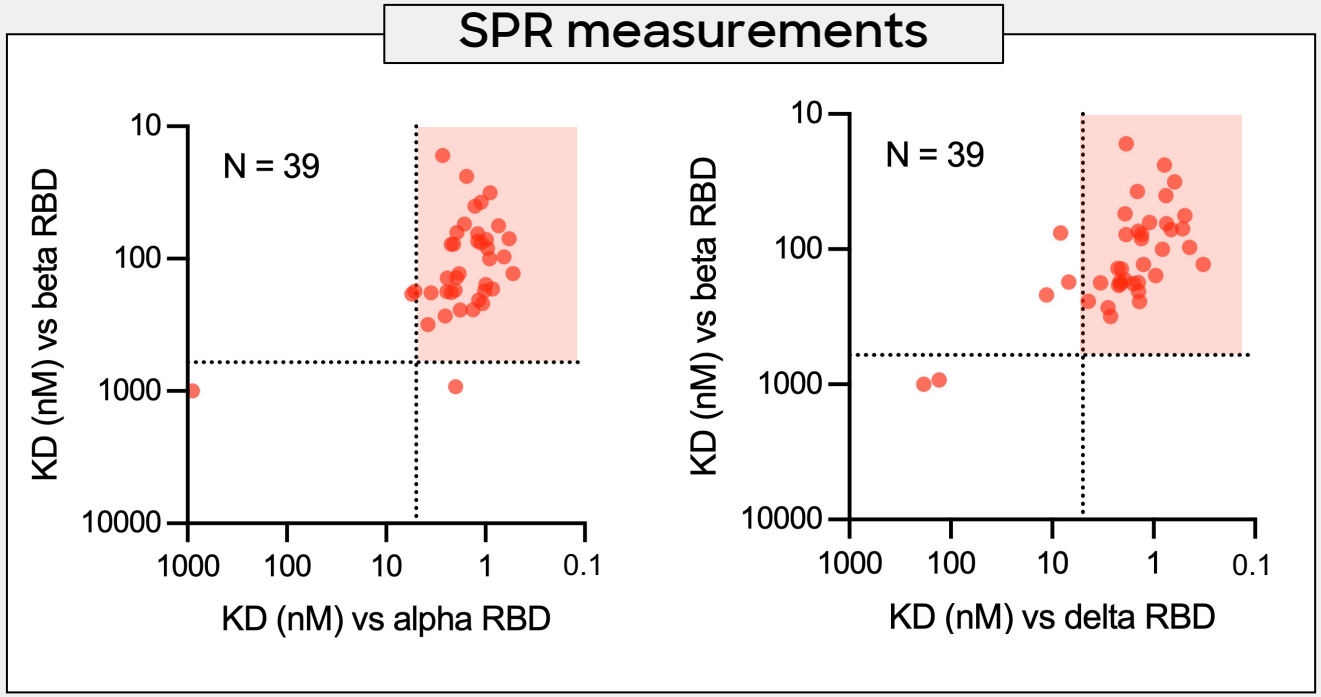
1 High correlation between ACE scores and SPR-measured -log10 KD values observed

AI model searches mutational space and top predictions are validated

3

Binders predicted to have the best binding towards all three SARS-CoV-2 variants are assessed in the lab by SPR

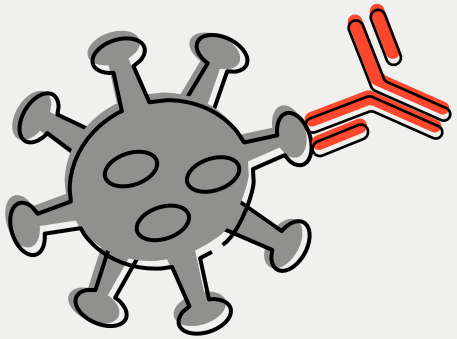
79% (31/39) of evaluated predictions exhibit higher binding affinity than parent antibody to alpha and beta and delta

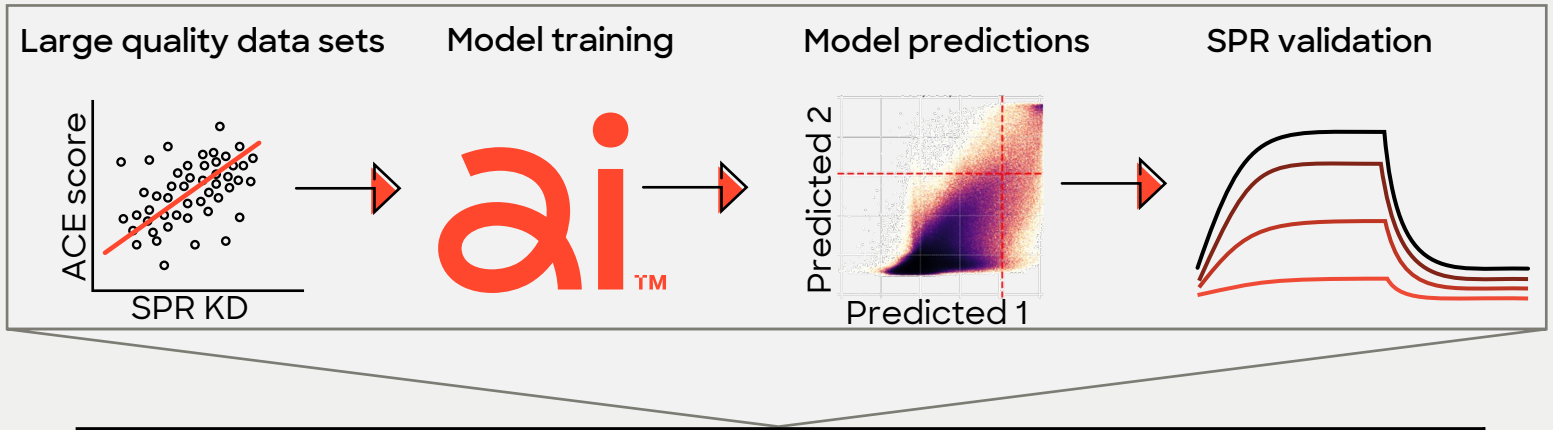


AI co-optimized binding to multiple SARS-CoV-2 variants

Case study outcome

AI-guided lead optimization platform delivers antibodies with improved binding towards all three desired variants



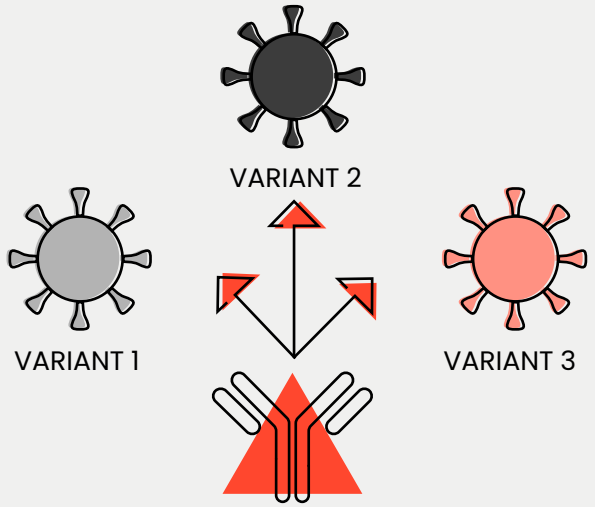


Fab	nM KD (fold improvement)		
	alpha RBD	beta RBD	delta RBD
Parental antibody	*8.0*	*607*	*5.4*
ABSCI001	*2.7 (3x)*	16 (37x)	1.9 (3x)
ABSCI002	1.5 (5x)	24 (25x)	0.8 (7x)
ABSCI003	0.9 (9x)	32 (19x)	0.6 (9x)
ABSCI004	1.1 (7x)	37 (16x)	1.4 (4x)
ABSCI005	1.3 (6x)	40 (15x)	0.8 (7x)

AI-optimization for dual- or multi-valent biologics increases potential

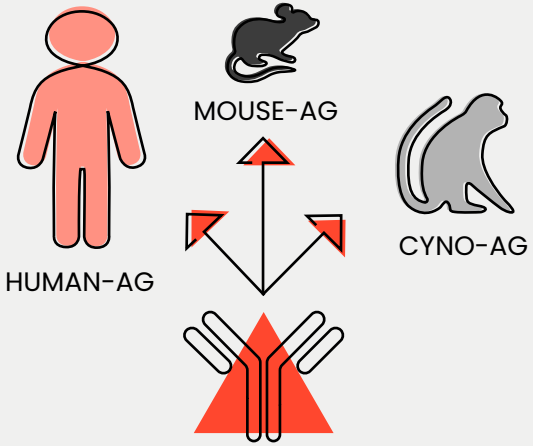
INFECTIOUS DISEASES

Broad spectrum antibodies with simultaneous binding to multiple viral variants



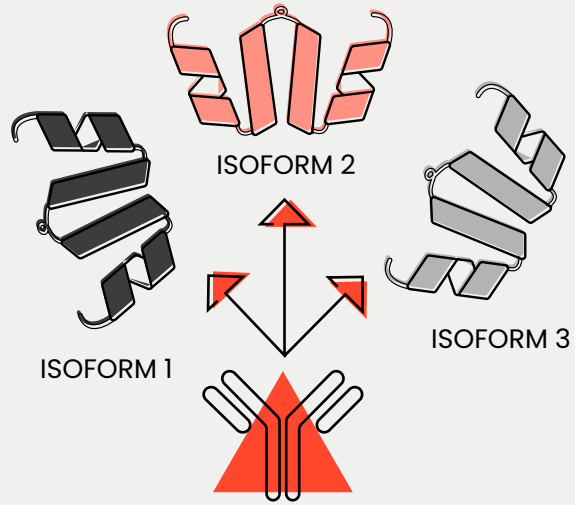
PRECLINICAL DEVELOPMENT

Cross-species binding for improved success rates and speed



IMMUNOLOGY

Increased potential efficacy by simultaneous binding to multiple desired isoforms

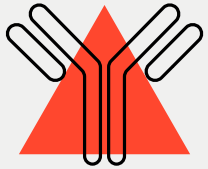


Industry-leading AI Drug Creation platform for biologics

Poised to rapidly progress antibody engineering based on strategic **investments in wet lab** capabilities & infrastructure, **and AI team talent**

AI models explore huge biological space to discover novel variants up to 12 mutations away from parental strain that confer tight binding

***De novo* design pipeline** creates antibodies **with new functionality** opening avenue for discovering differentiated best in class therapeutics



Multi-parametric optimization of molecules enabled by high throughput ACE assay. Additional functional assays enable deep characterization of candidates.

Design and validation pipeline scales to **greater than 10 targets in <10 weeks.**

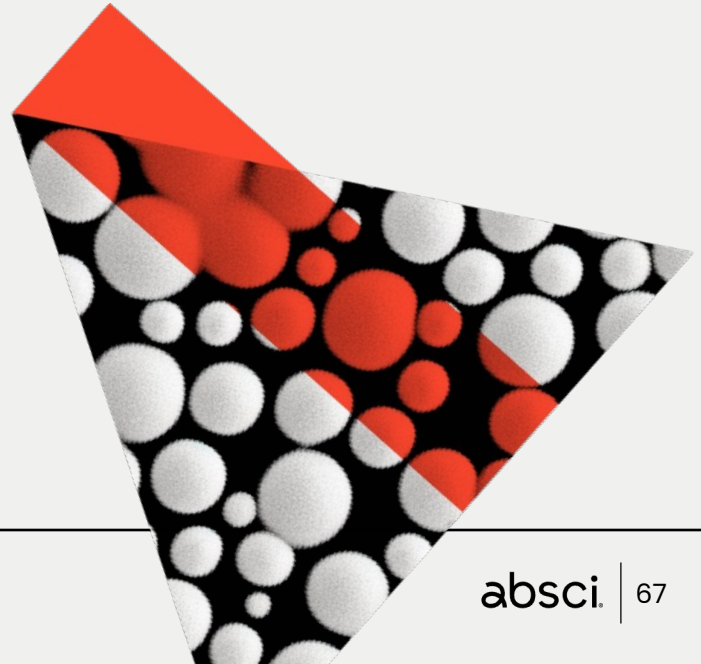
```
absci_library import codon_optimizer
ary
odon_optimizer.reverse_translate(library)
ary.to_csv("covid-antibody-designs.csv")
ary.to_wet_lab(assay="ACE")
```

```
from absci import lead_opt_model
lead_optimizer = lead_opt_model.load_late
library.naturalness =
lead_optimizer.naturalness(library)
lead_optimizer.optimize(library).to_wet_l
say="SPR")
```

Drug Creation

Christian Stegmann, PhD MBA

SVP, Drug Creation



Professional Background

CHRISTIAN STEGMANN, PH.D., MBA, SVP Drug Creation

- Experienced Drug Discovery leader with extensive background in structural biology and molecular pharmacology.
- Previously held the position of Head of Research and Non-clinical Development at CSL Vifor, guiding a transformation of its research team.
- Proven track record of bringing several new molecular entities to the clinical development phase.
- Prolific portfolio of publications and patents.
- Demonstrated ability to lead cross-functional teams in the pursuit of pioneering novel therapeutics.

BAYER

CSL Vifor

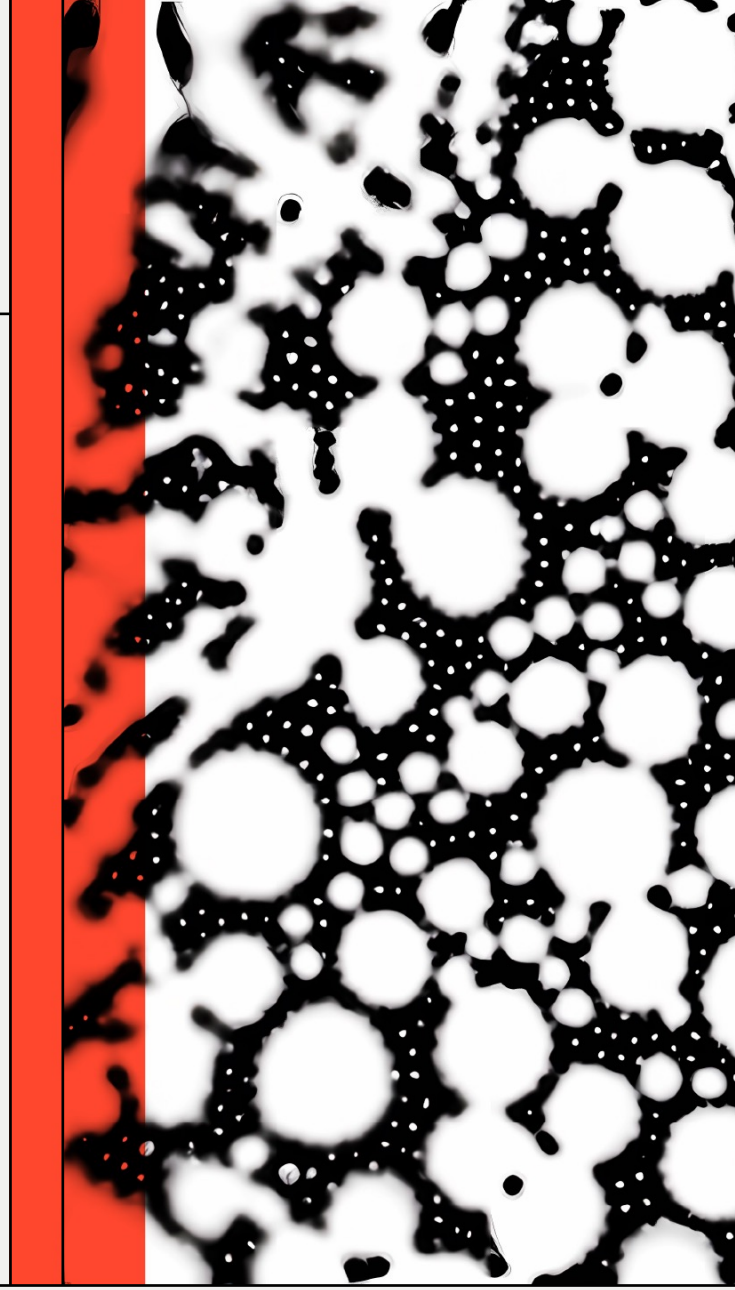
Massachusetts Institute of Technology

BROAD INSTITUTE

GEORG-AUGUST-UNIVERSITÄT GÖTTINGEN

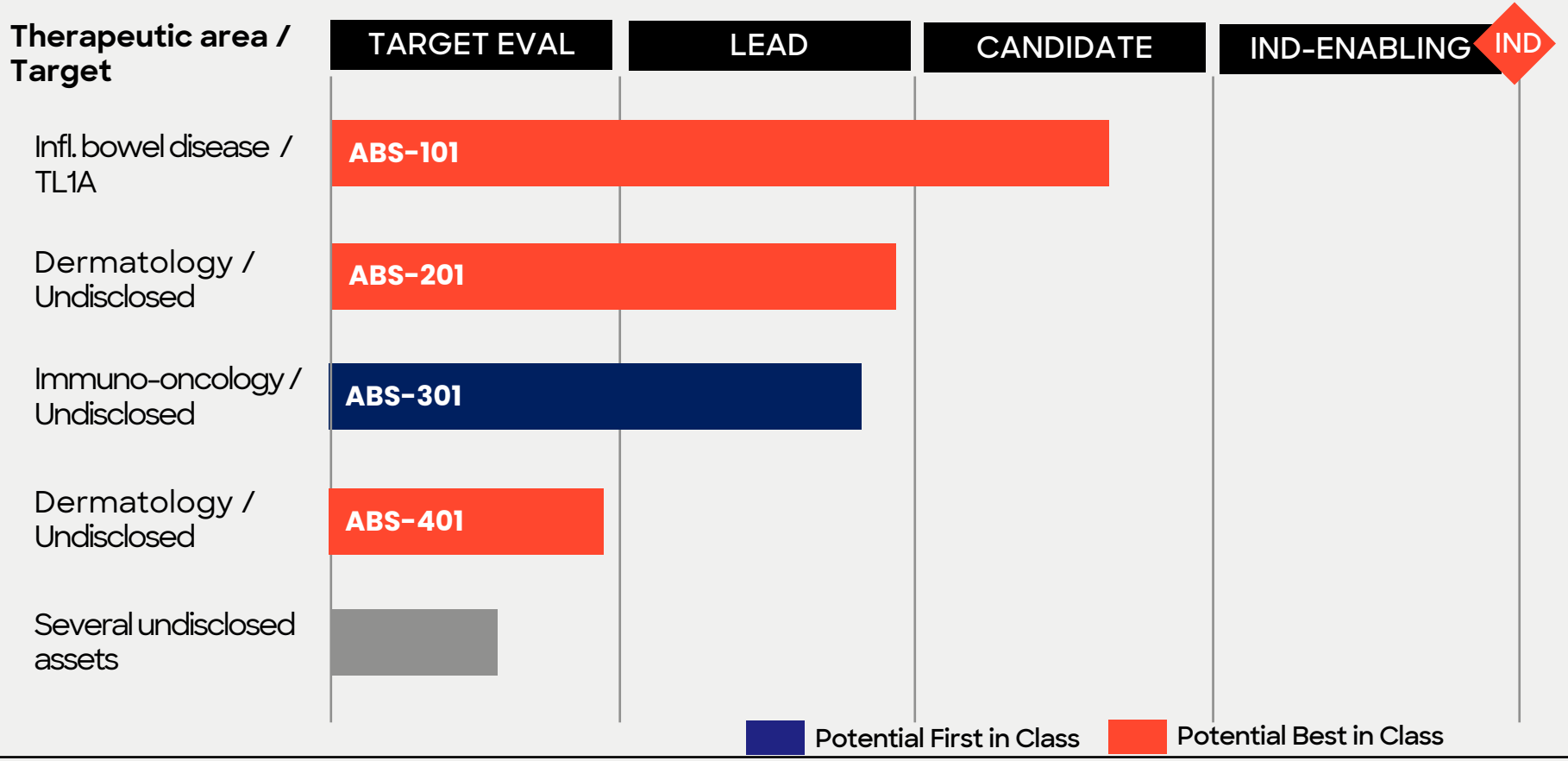
Topics

01	Absci Drug Creation Portfolio
02	Reverse Immunology Platform



Absci Internal Pipeline

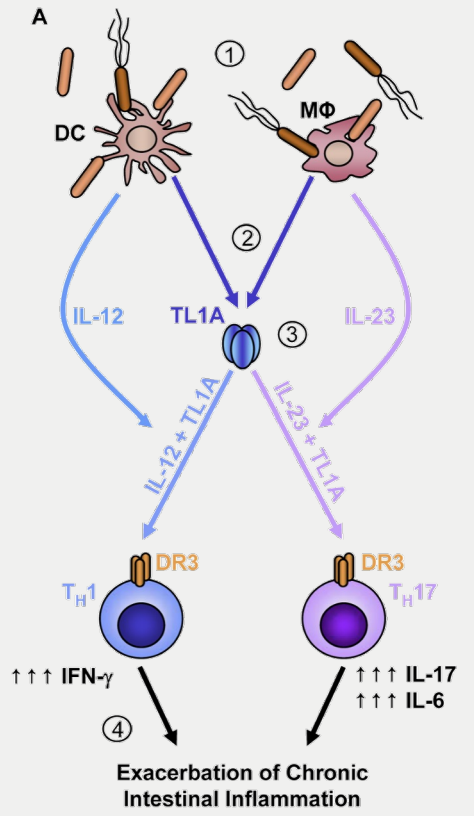
4 Absci owned internal assets focusing on cytokine biology
Each named asset has potential to reach IND filing stage in 2025 [1]



1 Cadence of IND filings subject to resources.

ABS-101

TL1A Antagonism has the potential to become a blockbuster in inflammation and fibrosis



Takedatsu 2008 Gastroenterology

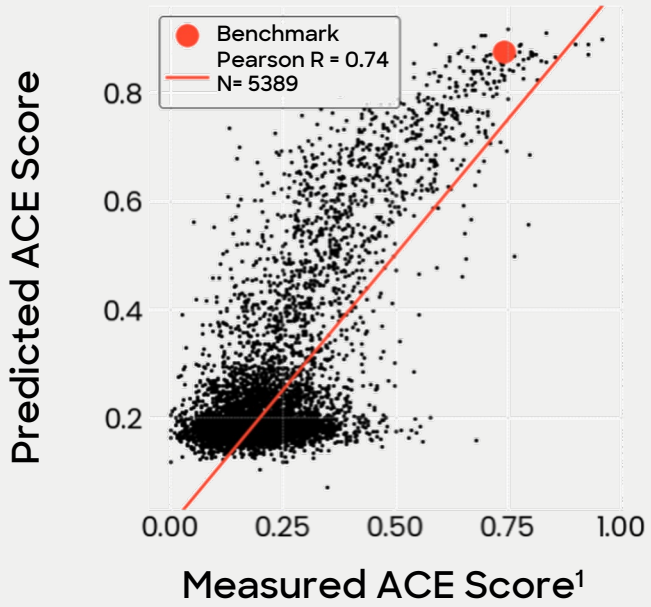
- IBD is currently a ~$24B market worldwide, expected to grow to ~$29B in 2028.
  - Sales dominated by biologics.
- Phase 2 data from Prometheus and Roivant validate MoA with clinical remission in Ulcerative Colitis (UC) and Crohn's Disease (CD) patients.
- TL1A drove a recent high-value deal: Prometheus acquired for $10.8B by Merck.
- TL1A is implicated in multiple inflammatory and fibrotic diseases beyond IBD:
  - Rheumatoid Arthritis
  - Atopic Dermatitis
  - Lupus Erythematosus
  - Psoriasis
  - Intestinal Fibrosis
  - Pulmonary Fibrosis
  - Liver Fibrosis

ABS-101

Major milestone in successfully applying Absci AI on pipeline asset

- Application of both *de novo* and lead optimization AI capabilities
- 143 variants identified with higher affinity than competitor by up to an order of magnitude and up to 12 amino acids edit distance
- Highly potent and diverse variants currently in final assessment to select therapeutic candidate

Proprietary ACE Assay™ screening technology enabled successful AI model training, resulting in variants exhibiting higher affinities than benchmark molecule

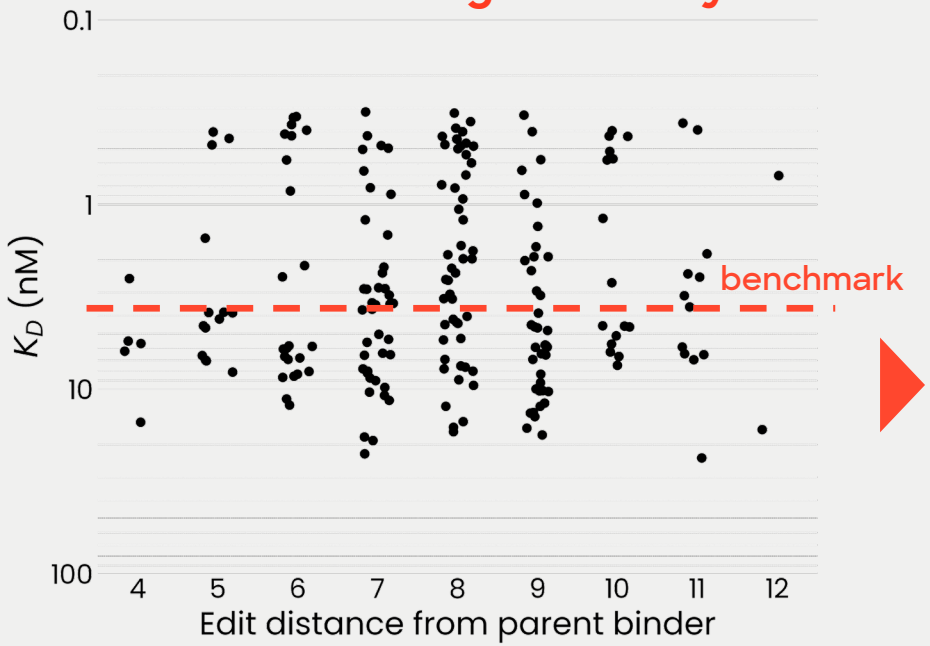


1 High correlation between ACE scores and SPR-measured -log10 KD values observed

ABS-101

AI design of potential best in class TL1A antagonist

143 hits with higher affinity than benchmark



20 leads selected for further profiling

Target Product Profile	
Primary Product Indication	Moderate to severe Ulcerative Colitis in adults
Dosing interval	Once monthly to once quarterly
Drug attributes	Higher binding affinity than competitor molecules. Increased neutralizing potency. Effector-less human Fc.

ABS-201 and ABS-401

Absci Dermatology Portfolio

ABS-201 FOR DERMATOLOGY

UNDISCLOSED DERMATOLOGICAL INDICATION WITH SIGNIFICANT UNMET NEED

- Efficacy of pharmacological standard of care not satisfactory

OPPORTUNITIES FOR DIFFERENTIATION:

- Potential best in class profile: High efficacy with once monthly or less frequent, low volume, subcutaneous injection

ABS-401 FOR DERMATOLOGY

POTENTIAL IN IMMUNE-MEDIATED SKIN CONDITIONS (E.G. PSORIASIS)

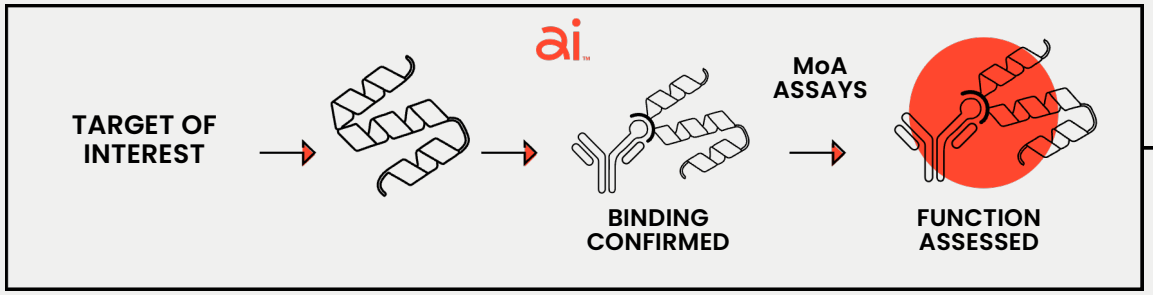
OPPORTUNITIES FOR DIFFERENTIATION:

- Provide a treatment option in currently poorly served patient populations

Harnessing the human adaptive immune response to identify novel targets and therapeutics

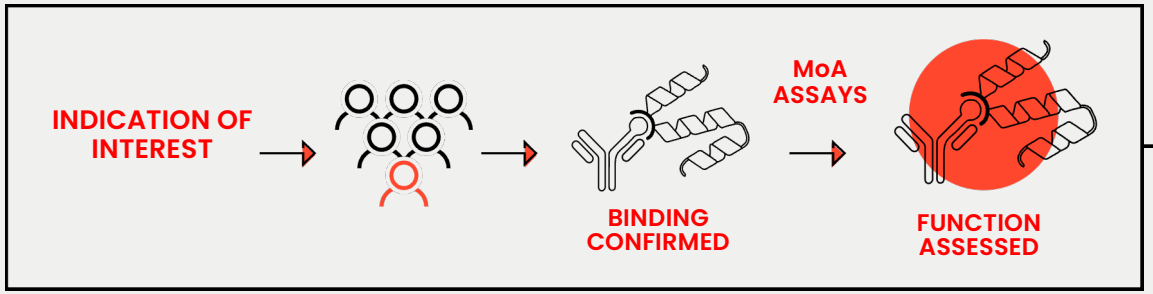
Target based approach
Antibody discovery through AI Design

TARGET -> LEAD



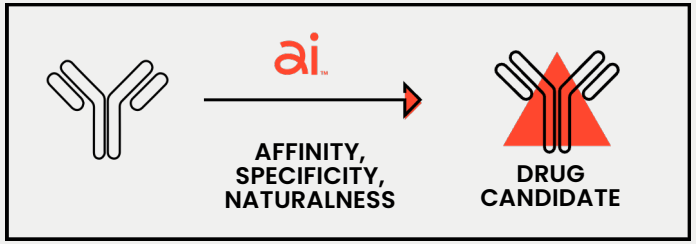
Reverse Immunology approach
Target and antibody discovery

PATIENTS -> LEAD -> TARGET

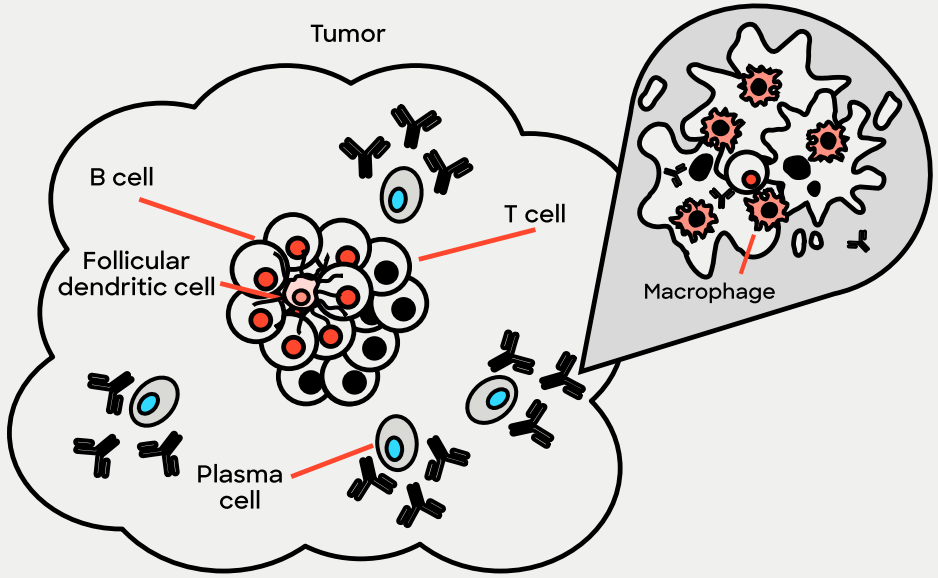


AI-driven lead optimization

LEAD -> MULTIPARAMETRIC OPTIMIZATION -> DRUG CANDIDATE

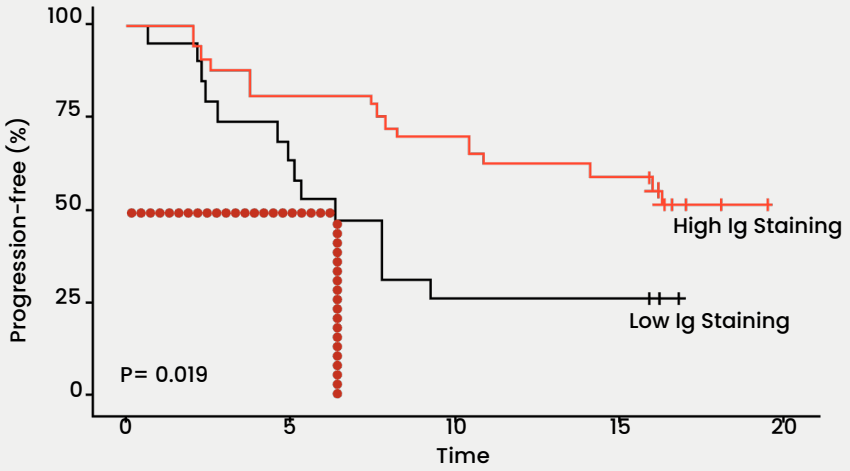


Antibodies selected in tertiary lymphoid structures bind to cancer cells and are associated with favorable clinical outcomes



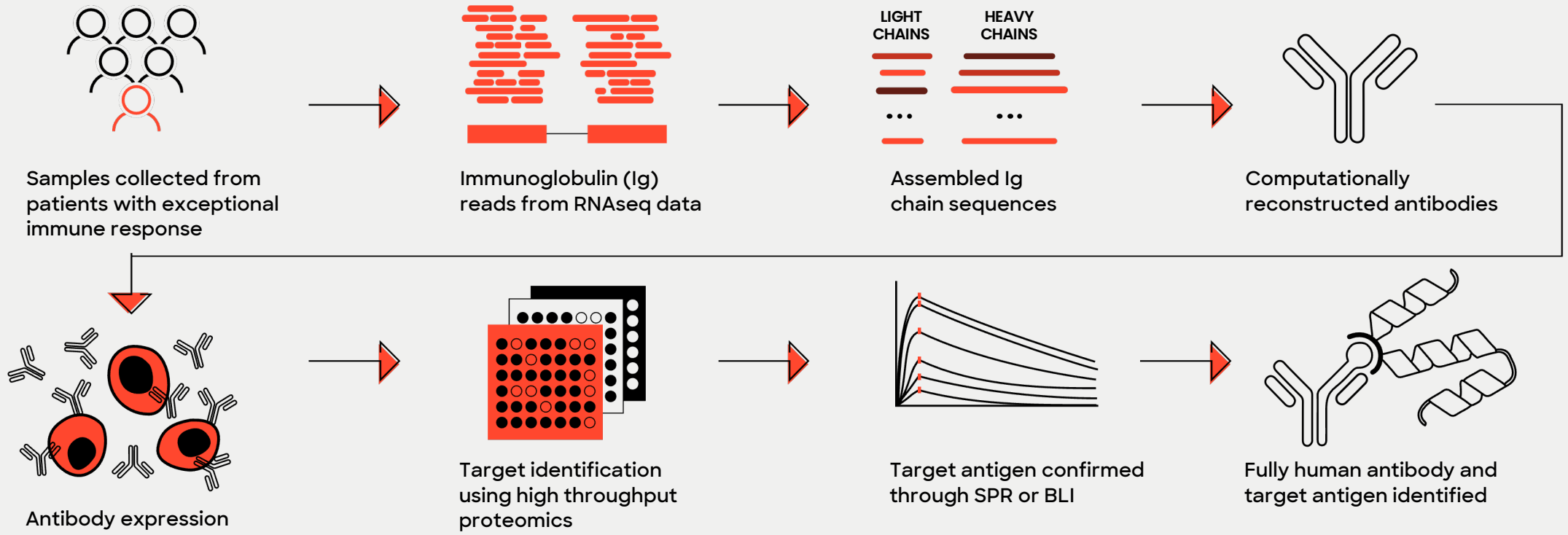
Tertiary Lymphoid Structures (TLS) are centers of immune activity (B-cell proliferation and antibody production) that develop in chronically inflamed tissues such as tumors.

Meylan, Maxime, et al. "Tertiary lymphoid structures generate and propagate anti-tumor antibody-producing plasma cells in renal cell cancer." Immunity 55.3 (2022): 527-541.

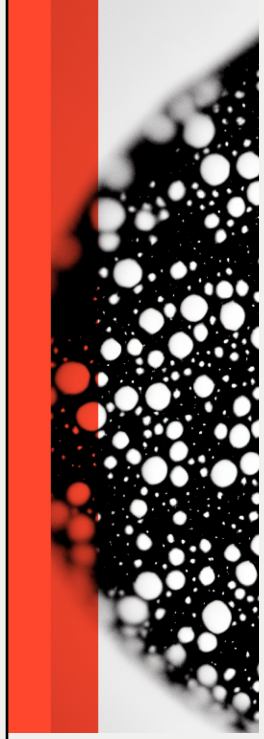


- The presence of TLS is associated with longer progression-free survival and better response to immune checkpoint inhibitors.
- Rapidly growing evidence illustrates correlation between TLS-derived antibodies in the tumor microenvironment and positive clinical outcomes.
- TLS-derived antibodies have been shown to be associated with apoptosis of cancer cells in patients.

Our integrated workflow identifies antigens targeted by exceptional immune response

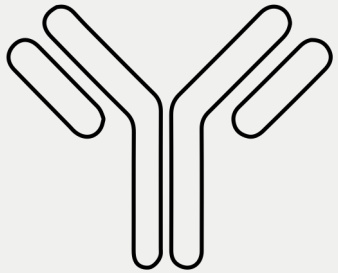


The landscape of high-affinity human antibodies against intratumoral antigens. Goran Rakocevic, Irina Glotova, Ines de Santiago, Berke Cagkan Toptas, Milena Popovic, Milos Popovic, Dario Leone, Andrew L. Stachyra, Deniz Kural, Daniele Biasci. bioRxiv 2021.02.06.430058; doi: https://doi.org/10.1101/2021.02.06.430058

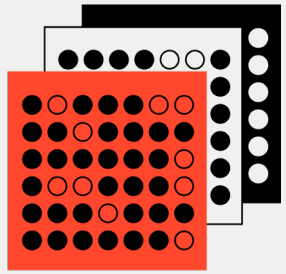


Discovery of a novel mechanism of tumor immune evasion using reverse immunology

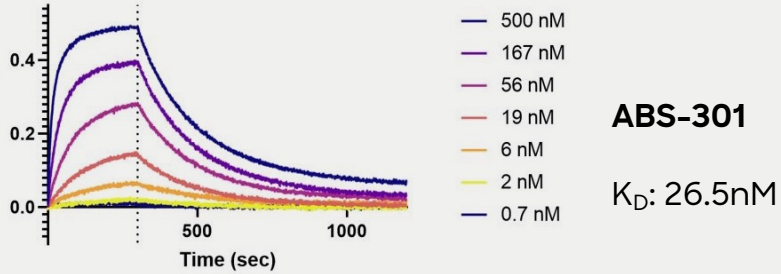
Target identification reveals potent and specific binding to an undisclosed target



Computationally reconstructed antibodies from human TLS biopsies



High-throughput proteomics screening technology covering the human proteome close to completeness



ABS-301

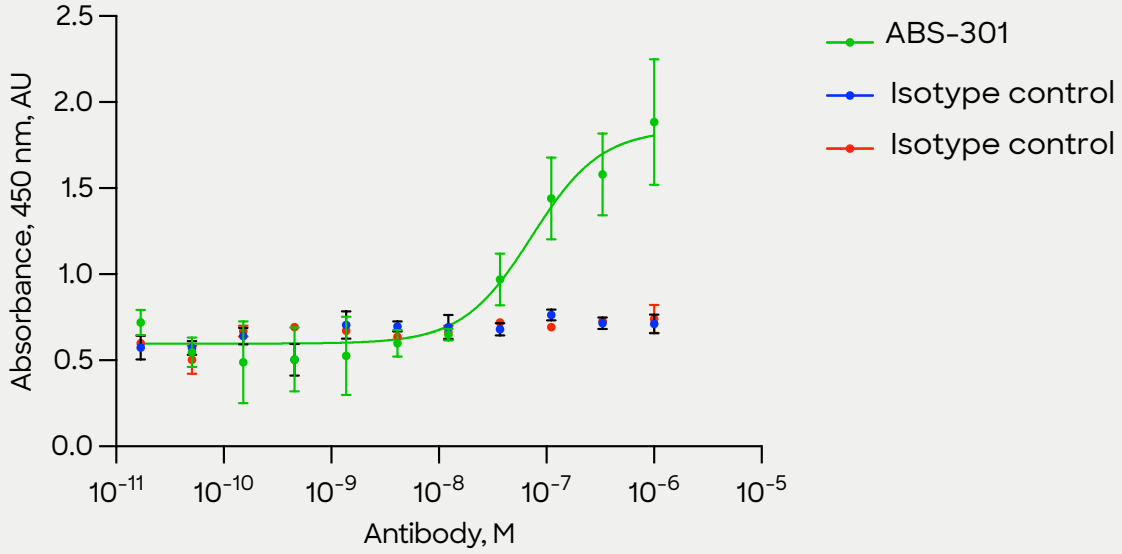
K_D: 26.5nM

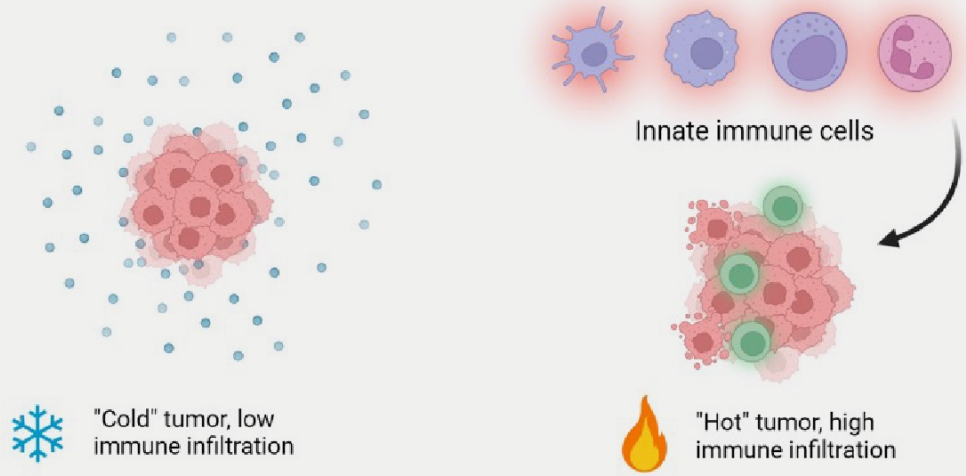
Biolayer interferometry validates potent and specific binding against a novel, undisclosed target

A patient-derived antibody reconstructed shows highly specific and potent binding of a novel target with potential in immuno-oncology.

ABS-301 inhibits a potential immune evasion switch

ABS-301 inhibits a potential immune evasion cytokine in primary human cells

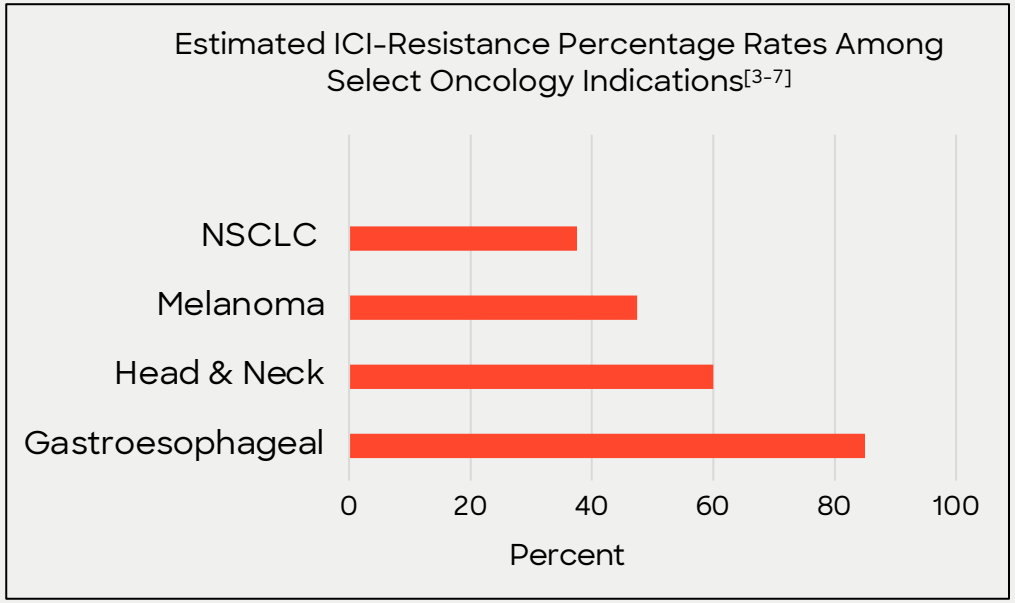




Hypothesis: Tumors upregulate ABS-301's target as an immune evasion strategy to limit immune infiltration and turn tumors immunologically "cold". ABS-301 treatment in cancer may release immune suppression and permit immune cells to infiltrate the tumor, allowing for a robust anti-tumor response.

ABS-301

ABS-301 has a broad potential in immuno-oncology



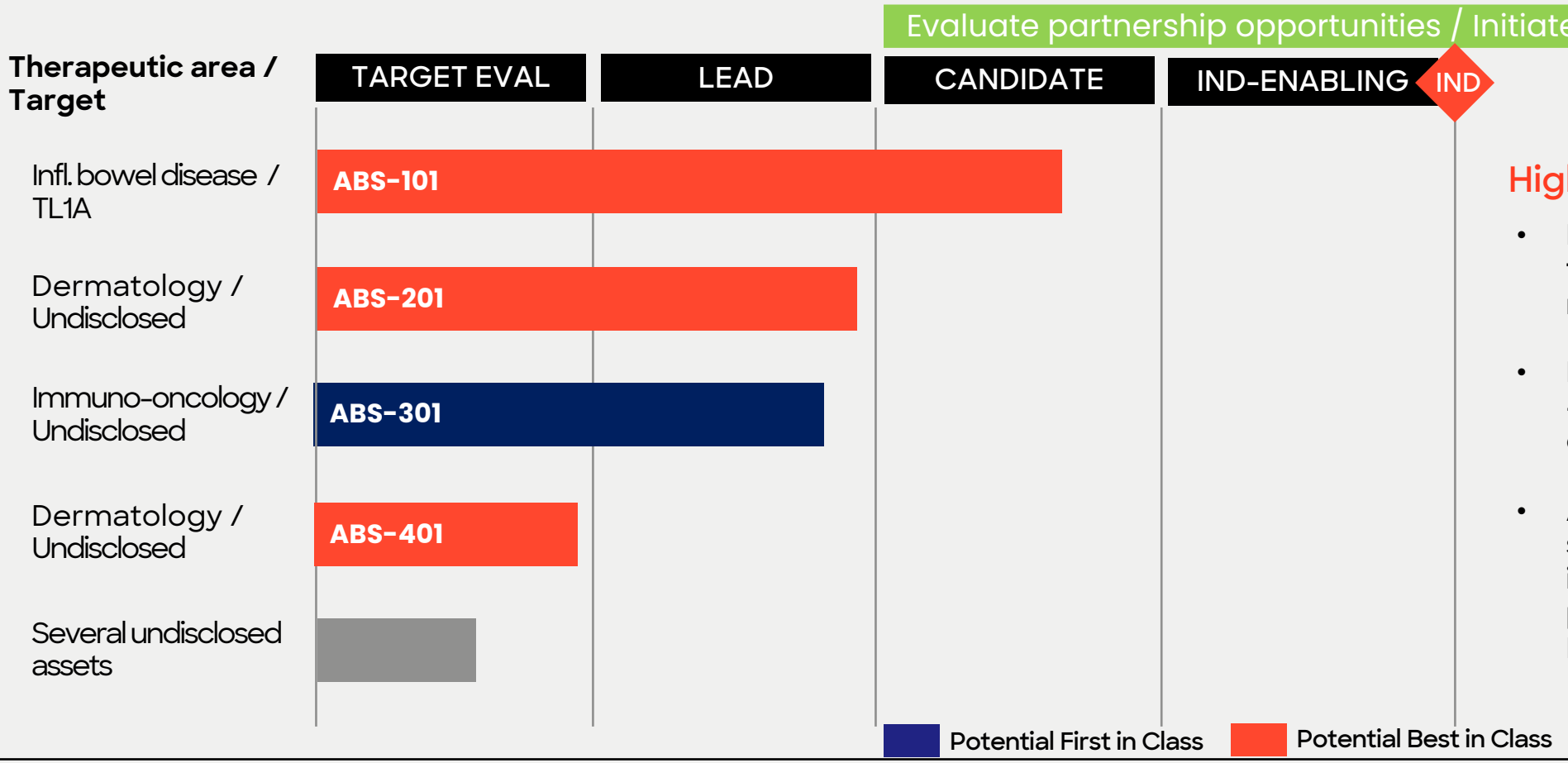
Indication	US Estimated New Cases in 2023 [1]	Estimated Global Therapeutics Market (2028)[2]
NSCLC	238K	$56B
Melanoma	98K	$14B
Head & Neck	54K	$5B
Gastroesophageal	48K	$3B

Comprehensive profiling of ABS-301's immuno-oncological potential in progress.

1. Siegel et al, CA, 2023, 73 (1), 17-48
2. Evaluate Pharma
3. Baxter et al, Br J Cancer 125, 1068-1079 (2021)
4. Lim, S.Y. et al, Nat Commun 14, 1516 (2023)
5. Zhou S et al, Front Immunol., 2023, 14:1129465
6. Huang Y et al, Cancers (Basel), 2023, 15(10):2733
7. Oualla K et al, Cancer Control, 2021, 10732748211004878

Absci Internal Pipeline

4 Absci owned internal assets focusing on cytokine biology
Each named asset has potential to reach IND filing stage in 2025 [1]



Highlights:

- Biologically and technically highly de-risked portfolio
- Focus on cytokine biology - first frontier of AI-driven disruption
- Ability to create significant value inflection in early clinical trials (i.e. proof-of-mechanism in Ph1 trial)

1 Cadence of IND filings subject to resources.

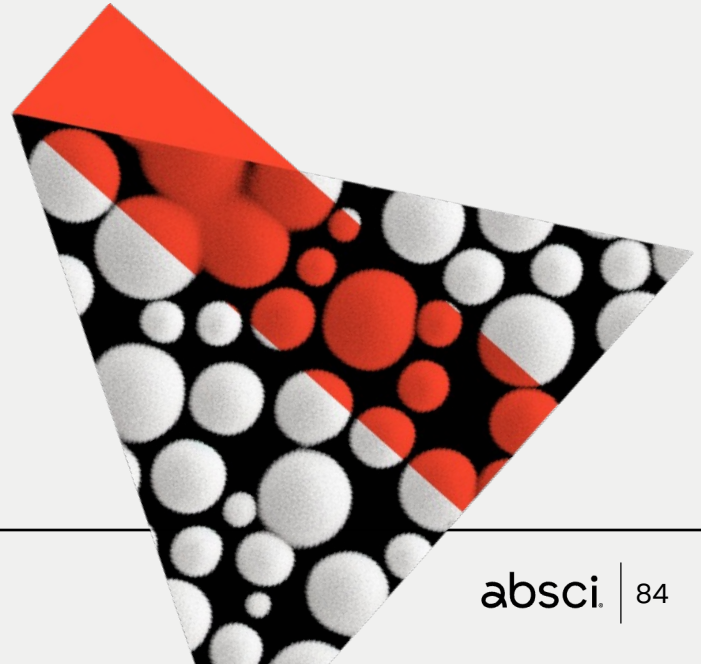
absci®

This revolution is only just beginning.

```
 absci_library import codon_optimizer
ary
odon_optimizer.reverse_translate(library)
ary.to_csv("covid-antibody-designs.csv")
ary.to_wet_lab(assay="ACE")
```

```
from absci import lead_opt_model
lead_optimizer = lead_opt_model.load_late
library.naturalness =
lead_optimizer.naturalness(library)
lead_optimizer.optimize(library).to_wet_l
say="SPR")
```

Q&A



absci®

THANK YOU

This revolution is only just beginning.