

Translating ideas into drugs

Corporate Presentation, March 2022



March 2022

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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," "aim," and "intends," or similar expressions. We intend these forward-looking statements, including statements regarding our strategy, future operations, future financial position and value of program portfolio, future programs, forms of revenue, including fees, milestones and royalties, research and technological development activities, efforts to scale fully in silico capabilities, 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.

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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.

One of the biggest breakthroughs in biotech came from big tech Al



Jumper, J., Evans, R., Pritzel, A. *et al.* Highly accurate protein structure prediction with AlphaFold. *Nature* **596**, 583–589 (2021).

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Biologic drug discovery is a complex combinatorial challenge

Possible mAb CDR sequence diversity exceeds the total number of atoms in the universe

~20⁶² mAb sequences¹ vs. ~10⁸⁰ atoms in the universe²

¹Assuming 62 positions (6 unique CDRs of approximately 7-13 residues in length) to vary with 20 possible amino acids per position ²https://www.thoughtco.com/number-of-atoms-in-the-universe-603795

The Problem

Biologic drug discovery fails too often

Only a subset of these sequences are biologically viable (i.e., sequences that are developable, non-immunogenic, etc.)



Subset of biologically viable mAbs

The Problem

Biologic drug discovery fails too often

High throughput wet lab screening samples a very small fraction of possible sequences, many of which are not suitable drug candidates



¹Paul, S., Mytelka, D., Dunwiddie, C. et al. How to improve R&D productivity: the pharmaceutical industry's grand challenge. Nat Rev Drug Discov 9, 203–214 (2010).

The Solution

Why Absci?

Proprietary wet lab data and AI enables Absci to explore **more** of the **right** sequences – ultimately bringing better drugs to patients



Absci is merging Al & synthetic biology to accelerate biologic drug discovery



Absci is applying Al to discover new drugs *and* novel drug targets



Vision



Integrated Drug Creation™

Absci has built an industry-leading data-centric platform for scalable, Al-enabled protein biologic discovery

Selected examples:

Deep contextual language models generate antibodies with specified target affinity

Case study: In silico predicted affinities with high correlation to actual binding affinity

 Al functional embeddings identify novel chaperones that increase titer & quality of protein biologics

Case Study: Discovered chaperones increased Fab yield ~2-fold and improved product quality

 Absci's nonstandard amino acid incorporation technology allows us to continue to out-evolve nature and design better drug candidates

Case Study: Bionic SoluPro® strain and nsAA incorporation



Case Study: Absci's Al-informed drug discovery

Toward *in silico* drug creation Designing drug candidates with desired attributes



Absci's *in silico* predicted affinities have high correlation with values measured in wet lab

- Absci's AI trained on our proprietary data generated by in-house synthetic biology platform using trastuzumab variants with sequence diversity in CDRH3
- Binding affinities for Absci AI-predicted K_D and measured K_D have high correlation (R = 0.85)

Absci goes beyond current state of the art and can **design desired target affinity** *in silico* **with high confidence**

Trastuzumab binding kinetics:

Absci's AI-predicted vs experimentally measured K_D





Case Study: Absci's Al-informed cell line development

Toward *in silico* drug creation Designing drug candidates with desired attributes



Absci's AI-discovered novel chaperone increased Fab yield 2-fold

- Absci's AI capable of understanding protein function & used to identify novel chaperones
- Protein XYZ was coexpressed with a difficultto-express Fab and fermentation yield increased 2-fold

Al identified >1,000 proteins as potential chaperones, including known chaperones & proteins of unknown function



Absci's Al accelerates our understanding of biology to improve manufacturability

Coexpression of Protein "XYZ" from root bacterium resulted in **2-fold increase in Fab yield**

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Case Study: Bionic SoluPro® strain and nsAA incorporation

Toward *in silico* drug creation Designing drug candidates with desired attributes



Out-evolving nature

Bionic Protein™ technology: Non-standard amino acid (nsAA) incorporation

Absci is advancing our high-yielding SoluPro[®] platform by enabling site-specific nsAA incorporation into difficult-to-produce biologics

Wide-ranging applications:

- Improved drug properties
- Half-life extension
- Site-specific, homogeneous, designer glycosylation
- Development of antibody-drug conjugates (ADCs)
- Attachment of novel chemical moieties

Out-evolving nature

Bionic[™] trastuzumab produced at ~1 g/L and <1% misincorporation



LC/MS/MS confirmation of nsAA incorporation



...WGGDGFYAMDYWGQGTLVTVSS[nsAA]STK...





Business Model

Toward *in silico* drug creation Designing drug candidates with desired attributes



Business Model

Program economics grow with successful development

Assembling a diverse portfolio of potential milestones & royalties



Sample NPV assumptions

Probability of success (cumulative)

- Discovery: 4%¹
- CLD: 8%¹

Timeline to approval

- Discovery ~13 years¹
- CLD: ~9 years¹

Royalties

Discovery: mid-single digits

License

exercise fee

CLD: low-single digits

Sales profile post-approval²

- Median peak sales for biologics: \$1.38 today; growing at 3% per annum
- Time to peak sales: 5 years

Royalties on sales & commercial milestones

absci ---> PARTNER

10 - 13+ years in development

Clinical & regulatory

milestones

12 years biologic exclusivity

*Illustrative of Absci's general beliefs regarding the potential value of downstream clinical and commercial success of partnered programs; does not depict any underlying data ¹Paul, S., Mytelka, D., Dunwiddie, C. et al. How to improve R&D productivity: the pharmaceutical industry's grand challenge. Nat Rev Drug Discov 9, 203–214 (2010). ²Company analysis of aggregated publicly available data from EvaluatePharma® [April, 2021] Evaluate Ltd.

Business Model

Creating a portfolio of programs with increasing value for drug & target discovery



January 7, 2022

Absci announces research collaboration with Merck

Drug Discovery

- Option to nominate up to 3 targets & enter into a drug discovery agreement
- \$610M potential upfront + milestones
- Tiered royalties on sales of approved drugs

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Research funding

Bionic Enzymes™

- Generation of nsAA-containing custom bioproduction enzymes
- Upfront and milestones

Investor highlights

A transformative year for Absci



Technology

- ✓ Platform expansion Launched Bionic Protein[™] Technology
- Demonstrated performance of Absci's AI deep learning platform

(Denovium Engine™) for drug discovery and cell line design

→ Bolstered Absci's Al capabilities with addition of antibody and target discovery technology (Totient Target Engine[™])

Company

- Subscription Strain Str
- Opened 77,000 ft² campus
- Raised \$435M+ of capital

Partnerships

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Signed flagship partnerships with Merck and EQRx, including multiple programs & full suite of drug discovery, AI, Bionic Protein[™], and CLD capabilities

15 Active Programs*

and forecasts five additional new programs in 2022 (eight total) of which majority will be drug discovery

Increased the economic value of portfolio on an NPV per program basis

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*As of January 10, 2022; Active Programs: programs in which we have negotiated, or expect to negotiate, license agreements for downstream milestones and royalties

Team

The right leadership team to accomplish the impossible







Matthew Weinstock, PhD Chief Technology Officer



Greg Schiffman, CPA Chief Financial Officer



Nikhil Goel, MS, MBA Chief Strategy Officer

Board of Directors



Sarah Korman, PhD, JD **General Counsel**

James Sietstra SVP, Business Development



Penelope Chief Morale Officer



Ivana Magovcevic-Liebisch, PhD, JD Eli Casdin CEO & President, Vigil Neuroscience CIO, Casdin Capital Board Chair



Zach Jonasson, PhD Managing Partner, PVP





Amrit Nagpal Managing Director, Redmile Group



CTO, Compass, Inc



Andreas Busch, PhD CSO, Cyclerion Therapeutics

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





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