UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d)
of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): August 11, 2026

ABSCI CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**001-40646**	**85-3383487**
(State or other jurisdiction of incorporation)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

18105 SE Mill Plain Blvd
Vancouver, WA 98683
(Address of principal executive offices, including zip code)

(360) 949-1041
(Registrant's telephone number, including area code)

Not Applicable
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	ABSI	The Nasdaq Global Select Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§ 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§ 240.12b-2 of this chapter).

Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Item 2.02. Results of Operations and Financial Condition.

On August 11, 2026, Absci Corporation (the "Company") announced its financial results for the second quarter ended June 30, 2026. A copy of the press release is being furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information contained in Item 2.02 of this Current Report on Form 8-K, together with Exhibit 99.1 hereto, is being furnished and shall not be deemed to be "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section and shall not be incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Item 8.01. Other Events.

From time to time, the Company presents and/or distributes slides and presentations to the investment community to provide updates and summaries of its business. On August 11, 2026, the Company released a presentation which includes certain internal pipeline program updates, which is available on the "News & Events" section of the Company's website. A copy of this presentation is filed as Exhibit 99.2 to this Current Report on Form 8-K and is incorporated by reference herein.

Item 9.01. Financial Statements and Exhibits.
(d) Exhibits

99.1 Press Release issued by the Company on August 11, 2026, furnished herewith.

99.2 Absci Corporate Presentation August 2026

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Absci Corporation

Date: August 11, 2026

By: /s/ Shelby Walker

Shelby Walker

Chief Legal Officer

Absci Reports Business Updates and Second Quarter 2026 Financial and Operating Results

Announced positive interim Phase 1 data from the HEADLINE™ trial of ABS-201

Completed $100 million underwritten offering, including $40 million strategic investment from Eli Lilly & Company

Cash, cash equivalents, and marketable securities now sufficient to fund operations into the second half of 2028

VANCOUVER, Wash. and NEW YORK, August 11, 2026 – Absci Corporation (Nasdaq: ABSI), a clinical-stage biopharmaceutical company advancing breakthrough therapeutics designed with generative AI, today reported financial and operating results for the quarter ended June 30, 2026.

“The positive Phase 1 interim data from our HEADLINE trial, combined with our strengthened balance sheet and advancing platform, position us well for what comes next,” said Sean McClain, Founder and CEO. “We are fast approaching defining moments for Absci, with interim proof-of-concept data for pattern hair loss later this year and our full 26-week readout in early 2027. These results have the potential to demonstrate ABS-201's regenerative mechanism and change the treatment paradigm for the millions of people living with pattern hair loss. And this is just the beginning for our prolactin receptor franchise within our overall proprietary pipeline, with endometriosis expansion ahead.”

Recent Highlights

- Reported positive interim Phase 1 data from Absci's first-in-human trial of ABS-201 (anti-PRLR antibody). Blinded, aggregate interim data suggest study drug was well tolerated and exhibited a favorable safety and tolerability profile. Based on available interim pharmacokinetic (PK) data across all four single ascending dose (SAD) cohorts, half-life for ABS-201 is estimated to be at least 65 days. These results support the potential for dosing two or three times over a six month period, pending confirmation through continued follow-up across all cohorts.
- Completed $100 million underwritten offering, including a $40 million strategic equity investment from Eli Lilly & Company, and participation from leading financial institutions including Adage, BVF Partners, Columbia Threadneedle, Invus, Redmile, and a large investment management firm.

- Continuing to dose participants with pattern hair loss (PHL) in multiple ascending dose (MAD) portion of the HEADLINE trial. Absci anticipates reporting interim proof-of-concept data from this study in the second half of 2026 and full proof-of-concept data in early 2027.

Prolactin (PRL) Program Portfolio

- **ABS-201 for Pattern Hair Loss:** ABS-201, currently undergoing Phase 1/2a studies, is being developed for pattern hair loss (PHL). Absci believes that ABS-201, if successfully developed and approved, could provide a significant new category of PHL treatment that offers the potential for durable hair growth with a convenient administration profile. In June, Absci announced positive interim Phase 1 data from the HEADLINE trial, demonstrating that the study medication appears well tolerated, with favorable safety data across all blinded single ascending dose (SAD) cohorts. Additionally, the estimated half-life of at least 65 days supports the potential for ABS-201's targeted dosing interval of two or three injections over a six-month period. Absci anticipates reporting interim proof-of-concept data in the second half of 2026 and full proof-of-concept data in early 2027.
- **ABS-201 for Endometriosis:** Endometriosis is a condition that impacts a large, underserved patient population with significant unmet medical need and poor standard of care. Endometriosis is prevalent in up to 10% of women worldwide, including an estimated 9 million women in the U.S., and there is currently no FDA-approved disease-modifying therapy. ABS-201 for endometriosis represents a novel non-sex steroid hormone mechanism, with potential to be disease-modifying, act on both pain and lesion growth, and offer an improved safety profile. With the safety, tolerability, and PK data generated in the ongoing HEADLINE trial, Absci anticipates initiation of a Phase 2 clinical trial for endometriosis in the fourth quarter of 2026, with potential proof-of-concept data in the second half of 2027.
- **ABS-202 for Undisclosed I&I Indication:** ABS-202 is an anti-PRLR antibody in preclinical development for an undisclosed I&I indication.

Other Internal Pipeline Programs and Partnerships

Absci continues to advance its ongoing drug creation partnered programs, as well as partnering discussions for other internal programs at various stages of preclinical and clinical development.

Absci's new partnership with Eli Lilly is tailored around the clinical development strategy for ABS-201, and does not confer any program rights to Eli Lilly. As part of Eli Lilly's $40 million strategic investment in Absci, a representative from Eli Lilly has joined Absci's Endometriosis Advisory Board.

Recent Publications, Presentations, and Abstracts

Peer-Reviewed Publications

- **mAbs 2026:** *"Efficient inference of non-polyreactive antibody variants dependent on local fine-tuning"*

Accepted Presentations and Abstracts

- **American Academy of Dermatology Innovation Academy (AAD) 2026:** *"ABS-201, an AI-designed Antibody, Blocks Prolactin/PRLR Signaling and Presents a Novel Biologic Strategy for the Treatment of Androgenetic Alopecia"*
- **Summer RosettaCon 2026:** *"Origin-1: A Generative AI Platform for De Novo Antibody Design Against Novel Epitopes"*
- **Third Barcelona Hair Meeting 2026:** *"ABS-201-Mediated Prolactin Receptor Inhibition Promotes Hair Growth in Androgen-Sensitive Male Scalp"*
- **European Academy of Dermatology and Venereology Congress (EADV) 2026:** *"Prolactin Receptor Antagonism by ABS-201 Drives Hair Follicle Growth and Stem/Progenitor Cell Expansion in Human Male Scalp Skin"*
- **American Society for Reproductive Medicine (ASRM) 2026:** *"Prolactin Receptor Blockade With Anti-Prolactin Receptor Antibody (Anti-PRLR Ab) Relieves Pain and Inflammation in a Homologous Transplant Mouse Model of Endometriosis"*

Second Quarter 2026 Financial Results

Revenue was $0.3 million for the three months ended June 30, 2026, compared to $0.6 million for the three months ended June 30, 2025.

Research and development expenses were $22.6 million for the three months ended June 30, 2026, compared to $20.5 million for the three months ended June 30, 2025. This increase was primarily driven by advancement of Absci's internal programs, including direct costs associated with external preclinical and clinical development of ABS-201, offset by a decrease in personnel-related costs.

Selling, general, and administrative expenses were $9.2 million for the three months ended June 30, 2026, compared to $8.5 million for the three months ended June 30, 2025. This increase was primarily due to stock-based compensation and other administrative costs.

Net loss was $33.2 million for the three months ended June 30, 2026, compared to $30.6 million for the three months ended June 30, 2025.

Cash, cash equivalents, and marketable securities as of June 30, 2026 were $201.1 million, compared to $125.7 million as of March 31, 2026. The cash, cash equivalents, and marketable securities as of June 30, 2026 reflects $93.6 million of net proceeds from Absci's underwritten offering completed in June 2026.

Based on the company's current projections, Absci now believes its cash, cash equivalents, and marketable securities will be sufficient to fund its operating plans into the second half of 2028.

Webcast Information

Absci will host a conference call to discuss its second quarter 2026 business updates and financial and operating results on Tuesday, August 11, 2026 at 4:30 p.m. Eastern Time / 1:30 p.m. Pacific Time. A webcast of the conference call can be accessed at investors.absci.com. The webcast will be archived and available for replay for at least 90 days after the event.

About Absci

Absci is advancing the future of drug discovery with generative design to create better biologics for patients, faster. Our Integrated Drug Creation™ platform combines cutting-edge AI models with a synthetic biology data engine, enabling the rapid design of innovative therapeutics that address challenging therapeutic targets. Absci's approach leverages a continuous feedback loop between advanced AI algorithms and wet lab validation. Each cycle refines our data and strengthens our models, facilitating rapid innovation and enhancing the precision of our therapeutic designs. Alongside collaborations with top pharmaceutical, biotech, tech, and academic leaders, Absci is advancing its own pipeline of AI designed therapeutics including ABS-201™, a groundbreaking innovation in hair regrowth with the potential to redefine treatment possibilities for androgenetic alopecia, commonly known as male and female pattern hair-loss. ABS-201 is also being investigated as a potential "best-in-class" therapeutic for endometriosis, a condition with significant unmet medical need and market potential. Absci is headquartered in Vancouver, WA, with AI Research Labs in New York City and Serbia, and an Innovation Center in Switzerland. Learn more at www.absci.com or follow us on LinkedIn (@absci), X (@Abscibio) and YouTube.

Forward-Looking Statements

Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Such statements include, but are not limited to, statements regarding any or all of the following: development and clinical progress of Absci's pipeline programs, including ABS-201, the design, enrollment, conduct, and timelines of our ongoing Phase 1/2a HEADLINE™ trial of ABS-201 for androgenetic alopecia; the anticipated timing of an interim proof-of-concept data readout for ABS-201 in the second half of 2026; the potential advancement of ABS-201 into Phase 3 development; the anticipated initiation of a Phase 2 clinical trial of ABS-201 for endometriosis in the fourth quarter of 2026 and a potential proof-of-concept readout in the second half of 2027; the anticipated characteristics and product profile of ABS-201 as a drug product, our target product profile

and its attributes, the terms, anticipated benefits and strategic rational of our collaboration with Elil Lilly including Eli Lilly's participation in our Endometriosis Advisory Board; the potential for an expedited development pathway including the possibility of advancing directly from Phase 1/2a into Phase 3, our planned engagement with the FDA regarding development strategy, and potential market opportunity and commercial prospects for ABS-201 in pattern hair loss and endometriosis; projections regarding potential market opportunity based on various assumptions, including potential regulatory approval, the final approved label, and the evolving competitive landscape, any of which could cause our actual addressable market to differ materially from these projections; the capabilities, development, and anticipated benefits of our ATLAS platform; Absci's strategy, goals, anticipated financial performance and the sufficiency of its cash, cash equivalents and marketable securities to fund operating plans into the second half of 2028; and expected benefits of its collaborations with partners. Risks that contribute to the uncertain nature of the forward-looking statements include, without limitation, the risks and uncertainties discussed under the heading "Risk Factors" in Absci Corporation's most recent annual report on Form 10-K and in any other subsequent filings made by Absci Corporation with the U.S. Securities and Exchange Commission. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date they are made. We disclaim any obligation or undertaking to update or revise any forward-looking statements contained in this press release, other than to the extent required by law.

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Corporate Vice President
Head of Investor Relations
investors@absci.com

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Absci Corporation

Unaudited Condensed Consolidated Statements of Operations

	For the Three Months Ended June 30,		For the Six Months Ended June 30,	
(In thousands, except for share and per share data)	**2026**	**2025**	**2026**	**2025**
Revenues				
Partner program revenue	$ 318	$ 593	$ 533	$ 1,772
Operating expenses				
Research and development	22,616	20,458	41,891	36,822
Selling, general and administrative	9,164	8,528	18,222	18,000
Depreciation and amortization	2,696	3,000	5,424	6,072
Total operating expenses	34,476	31,986	65,537	60,894
Operating loss	(34,158)	(31,393)	(65,004)	(59,122)
Other income (expense)				
Interest expense	(2)	(56)	(20)	(135)
Other income, net	990	1,011	2,273	2,469
Total other income, net	988	955	2,253	2,334
Loss before income taxes	(33,170)	(30,438)	(62,751)	(56,788)
Income tax expense	(40)	(131)	(58)	(127)
Net loss	$ (33,210)	$ (30,569)	$ (62,809)	$ (56,915)
Net loss per share: Basic and diluted	$ (0.21)	$ (0.24)	$ (0.40)	$ (0.45)
Weighted-average common shares outstanding: Basic and diluted	157,471,712	127,592,948	155,217,585	126,035,844

Absci Corporation

Unaudited Condensed Consolidated Balance Sheets

(In thousands, except for share and per share data)	June 30, 2026	December 31, 2025
ASSETS		
Current assets:		
Cash and cash equivalents	$ 107,865	$ 20,025
Marketable securities	93,277	124,267
Prepaid expenses and other current assets	7,124	5,281
Total current assets	208,266	149,573
Operating lease right-of-use assets	2,442	2,914
Property and equipment, net	16,721	20,860
Intangibles, net	40,051	41,514
Restricted cash, long-term	1,054	1,053
Other long-term assets	383	383
TOTAL ASSETS	$ 268,917	$ 216,297
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	$ 16,257	$ 19,348
Long-term debt	150	873
Operating lease obligations	2,037	1,805
Deferred revenue	1,154	739
Total current liabilities	19,598	22,765
Operating lease obligations, net of current portion	1,642	2,624
Deferred revenue, long-term	240	436
Other long-term liabilities	1,306	1,023
TOTAL LIABILITIES	22,786	26,848
STOCKHOLDERS' EQUITY		
Preferred stock	—	—
Common stock	17	15
Additional paid-in capital	933,557	813,627
Accumulated deficit	(687,593)	(624,784)
Accumulated other comprehensive income	150	591
TOTAL STOCKHOLDERS' EQUITY	246,131	189,449
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 268,917	$ 216,297


GENERATIVE AI
DRUG
CREATION
Corporate Presentation
August 2026
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Disclaimers

1 FORWARD-LOOKING STATEMENTS

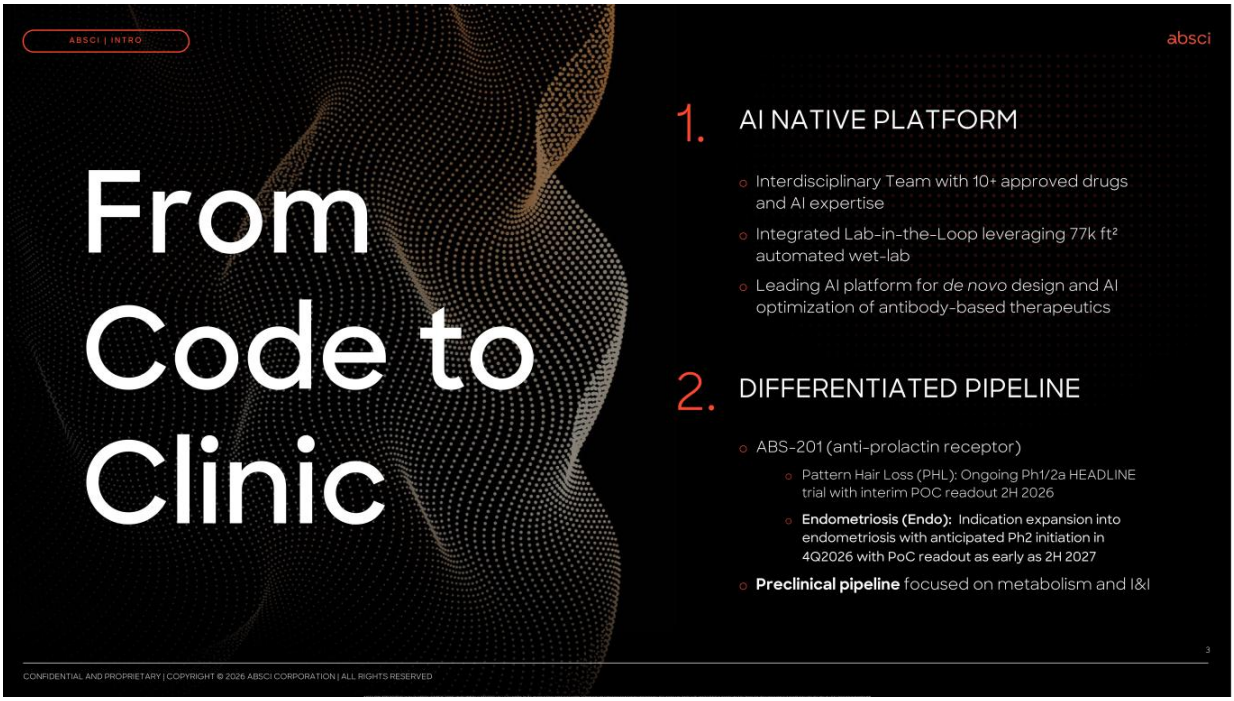
Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Such statements include, but are not limited to, statements regarding any or all of the following: (i) Absci's preclinical studies, clinical trials, as well as partnered and internally developed programs, including, without limitation, manufacturing capabilities, status of such studies and trials and expectations regarding data, safety and efficacy generally; (ii) data included in the above-described oral presentation, as well as the ability to use data from ongoing and planned clinical trials for the design and initiation of further clinical trials; (iii) projections regarding potential market opportunity, potential regulatory approval, the final approved label, and evolving competitive landscapes, as well as certain research findings based on participant responses to a hypothetical product profile and not any clinical results for ABS-201; (iv) Absci's strategy, goals, anticipated financial performance and the sufficiency of its cash resources; (v) regulatory submissions and authorizations, including timelines for and expectations regarding any anticipated regulatory agency decisions; (vi) the expected benefits of its collaborations with partners; and (vii) the therapeutic value, development, and commercial potential of antibody therapies, as well as other technologies. Risks that contribute to the uncertain nature of the forward-looking statements include, without limitation, the risks and uncertainties discussed under the heading "Risk Factors" in Absci Corporation's most recent annual report on Form 10-K and in any other subsequent filings made by Absci Corporation with the U.S. Securities and Exchange Commission. Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date they are made. We disclaim any obligation or undertaking to update or revise any forward-looking statements contained in this press release, other than to the extent required by law.

2 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.

3 TRADEMARK USAGE

This presentation/document/webpage contains references to our trademarks and service marks and to those belonging to third parties. Absci®, a®, SoluPro®, Bionic SoluPro® and SoluPure® are Absci registered trademarks with the U.S. Patent and Trademark Office. We also use various other trademarks, service marks and trade names in our business, including the Absci AI logo mark (ai), the Unlimit with us mark (Unlimit With Us™), Denovium, Integrated Drug Creation, HiPrBind, and IgDesign. All other trademarks, service marks or trade names referred to in this presentation/document/webpage are the property of their respective owners. Solely for convenience, the trademarks and trade names in this presentation/document/webpage may be referred to with or without the trademark symbols, but references which omit the symbols should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto


ABSCI | INTRO
absci
From Code to Clinic
1. AI NATIVE PLATFORM
Interdisciplinary Team with 10+ approved drugs and AI expertise
Integrated Lab-in-the-Loop leveraging 77k ft² automated wet-lab
Leading AI platform for de novo design and AI optimization of antibody-based therapeutics
2. DIFFERENTIATED PIPELINE
ABS-201 (anti-prolactin receptor)
Pattern Hair Loss (PHL): Ongoing Ph1/2a HEADLINE trial with interim POC readout 2H 2026
Endometriosis (Endo): Indication expansion into endometriosis with anticipated Ph2 initiation in 4Q2026 with PoC readout as early as 2H 2027
Preclinical pipeline focused on metabolism and I&I
3
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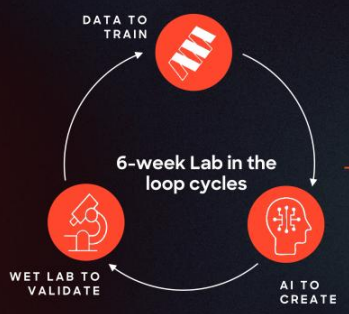
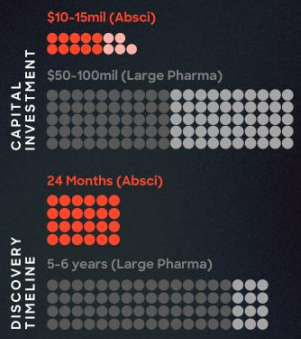
FROM CODE TO CLINIC

absci

Industrializing Drug Discovery





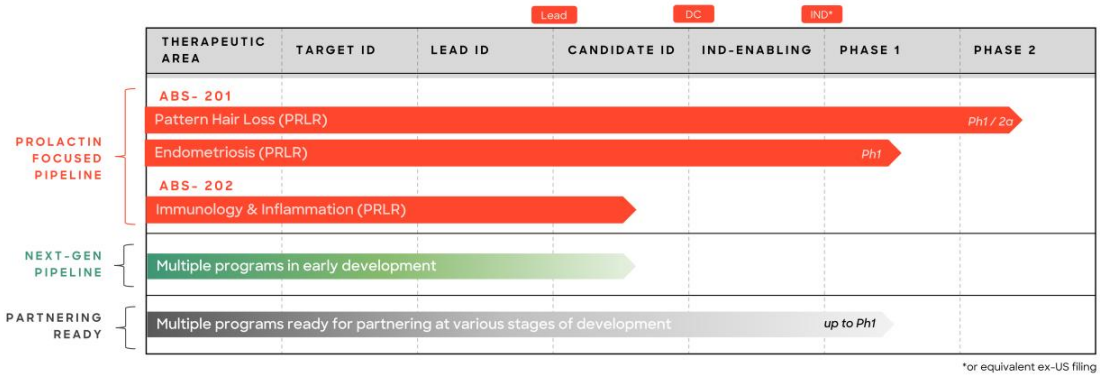
1. **ABS-201 FOR PATTERN HAIR LOSS**
   Category re-defining opportunity for PHL in Ph1/2a trials
2. **ABS-201 FOR ENDOMETRIOSIS**
   Disease modifying opportunity for Endometriosis in Ph1 trials
3. **ABS-101 FOR IBD**
   Demonstrated improved half-life and tissue penetration vs 1st gen TL1a molecules and ready for partnering

INDUSTRIALIZED AI x WET-LAB ENGINE

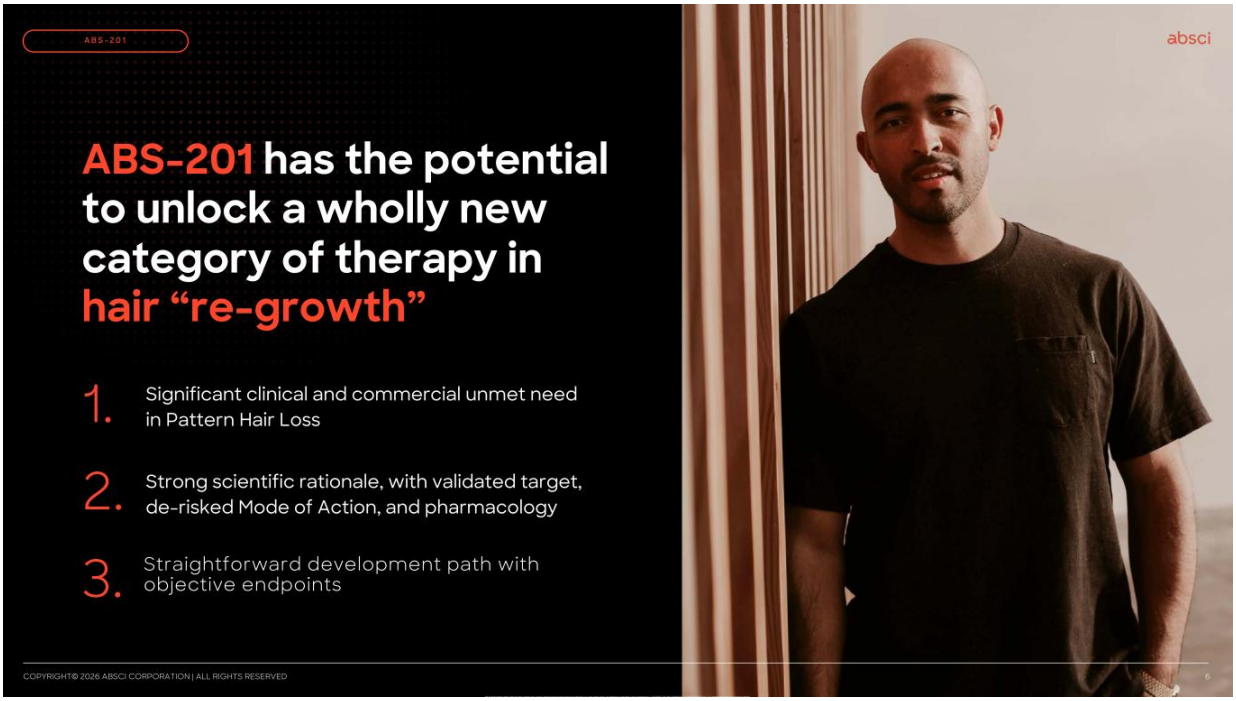
INCREASING 'SHOTS-ON GOAL' WITH FASTER AND CAPITAL EFFICIENT DISCOVERY

DELIVERING 3 CLINICAL-STAGE PROGRAMS TO DATE

Advancing and expanding our pipeline of novel & differentiated assets designed using AI



*or equivalent ex-US filing


ABS-201
absci
ABS-201 has the potential to unlock a wholly new category of therapy in hair “re-growth”
1. Significant clinical and commercial unmet need in Pattern Hair Loss
2. Strong scientific rationale, with validated target, de-risked Mode of Action, and pharmacology
3. Straightforward development path with objective endpoints
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6

Underserved patient population looking for therapeutic innovation

~80 million Americans live with Pattern Hair Loss (PHL)

MALE PHL

~50M men in the U.S.

Only 2 FDA approved drug therapies

FEMALE PHL

~30M women in the U.S.

Only 1 FDA approved drug therapy for women

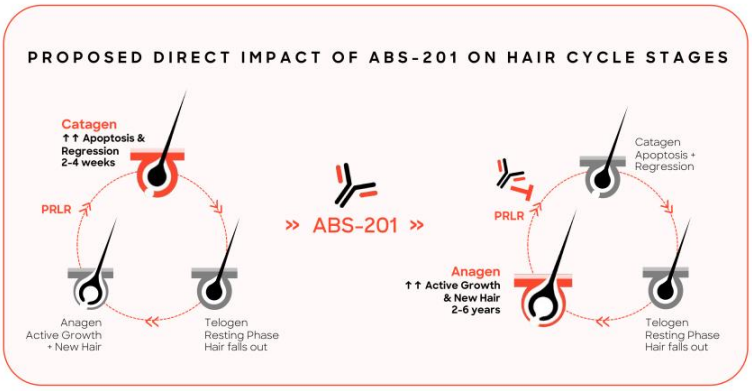
Growing patient population with limited therapeutic options and concerns of adverse side-effects

Last FDA approved therapy for Pattern Hair Loss was in the 1990s

Patients and clinicians need better treatment options for "hair re-growth"

- Hair re-growth, not just slowing of hair loss
- Safe and minimal side effects
- Durable effect
- Convenient administration frequency
- FDA approved

PRLR inhibition for Pattern Hair Loss is an innovative alternative to current treatment options

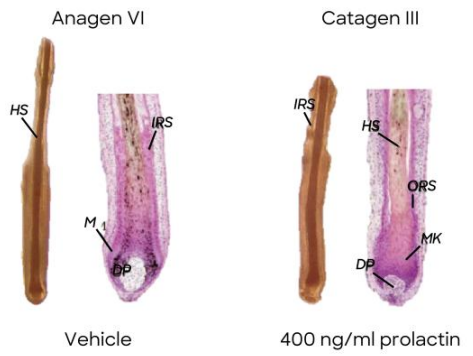


ABS-201 HAS THE POTENTIAL TO:

- **Shift the balance in hair cycle stage towards anagen phase[1,2] with:**
  - Active and new hair growth
  - Prevention of telogen effluvium
- **Promote a long-lasting effect after treatment cessation**
- **Block cessation of pigmentation, which may lead to the restoration of hair pigmentation[2]**

Prolactin impacts on organ-cultured human hair follicles

Prolactin drives hair follicle regression in human ex vivo culture

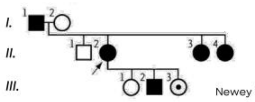


Prolactin prematurely induces a catagen-like stage in organ-cultured human hair follicles[1] characterized by:

- Condensed shape of the dermal papilla (DP)
- Diminishment of the hair matrix volume
- Apparent cessation of pigmentation
- Inhibition of hair shaft elongation

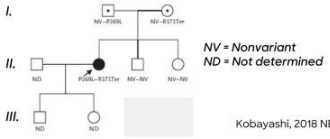
PRLR inhibition anticipated to be safe & well tolerated as supported by human genetics

Dominant negative
PRLR loss-of-function



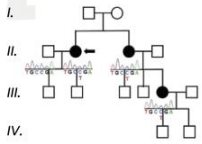
Newey & Phil , 2013 NEJM

Compound heterozygous
PRLR loss-of-function



Kobayashi, 2018 NEJM

Dominant negative
PRL loss-of-function

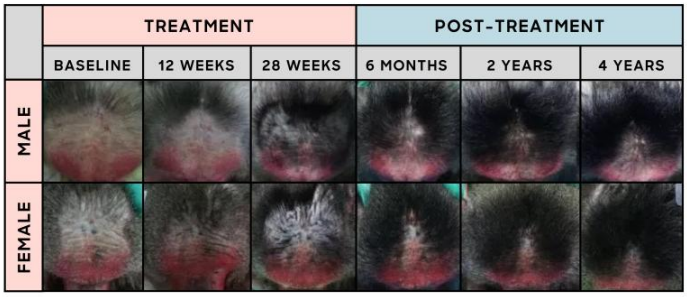


Moriwaki, 2021 JCEM

Reduced/Loss of PRL or PRLR Signaling

- Postpartum agalactia
- Otherwise in good health:
  - No apparent impact on fertility
  - No report on erectile dysfunction in male
  - Normal breast development and menses in females
  - Normal serum electrolytes and hormone levels (except elevated PRL in PRLR mutation carrier)
  - No reported abnormalities of other hypothalamic-pituitary axes

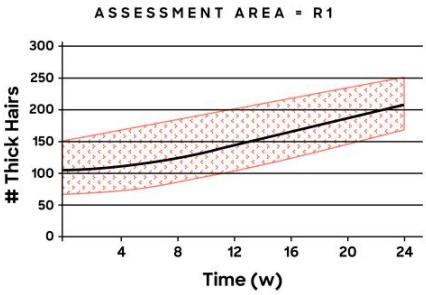
Top head view of Stumptailed Macaque's showing phenotypic change over time



40mg/kg s.c. Q2W for 28 weeks

Study commissioned by Absci CIO Andreas Busch while at Bayer. Disclosure from competitor

Terminal hair count "Thick Hairs" in prior bald areas

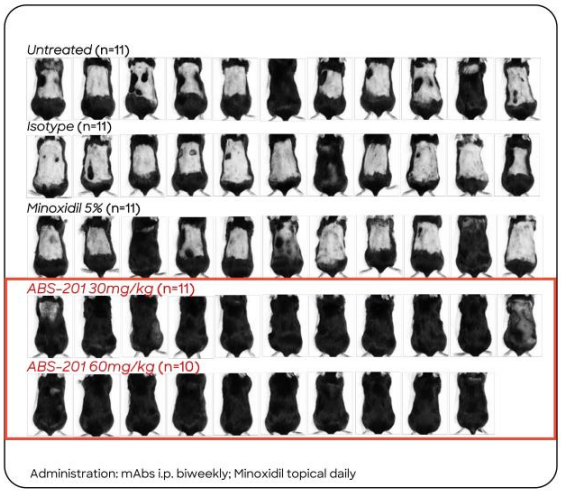


- Hair density & thickness improved with short treatment duration in primate model of Pattern Hair Loss
- Hair growth remains and improves several years post cessation

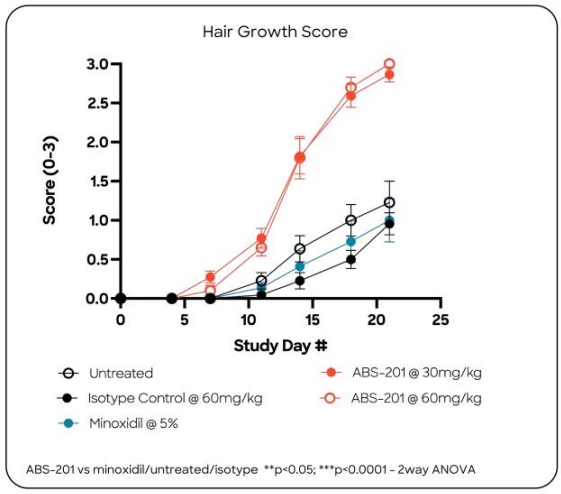
- Hair regrowth observed for both male and female animals (>100 hairs/cm2 increase in bald area at week 28 of treatment*)

*WO 2019/011719 A1

ABS-201 shows superior efficacy vs 5% topical minoxidil in 21d hair regrowth model

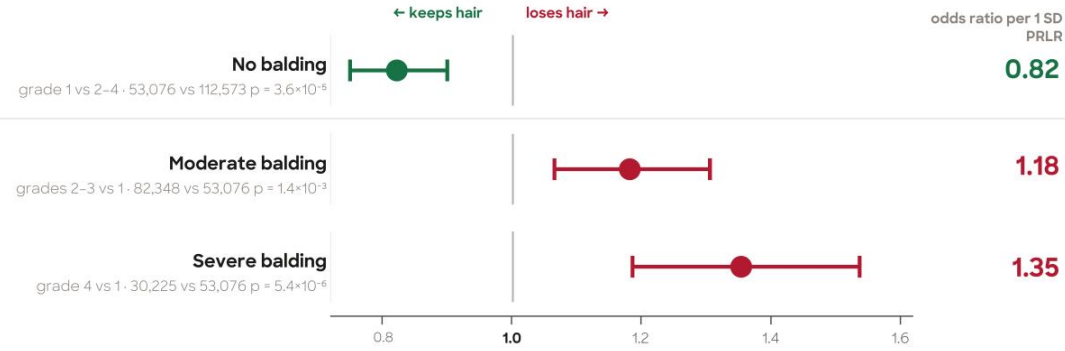


Administration: mAbs i.p. biweekly; Minoxidil topical daily



ABS-201 vs minoxidil/untreated/isotype **p<0.05; ***p<0.0001 - 2way ANOVA

Men without PHL carry genetically lower PRLR levels; severity of PHL scales with PRLR expression



- **Dose-response:** odds ratios climbs across the severity spectrum.
- More PRLR, more hair loss – **ABS-201 blocks PRLR signaling**

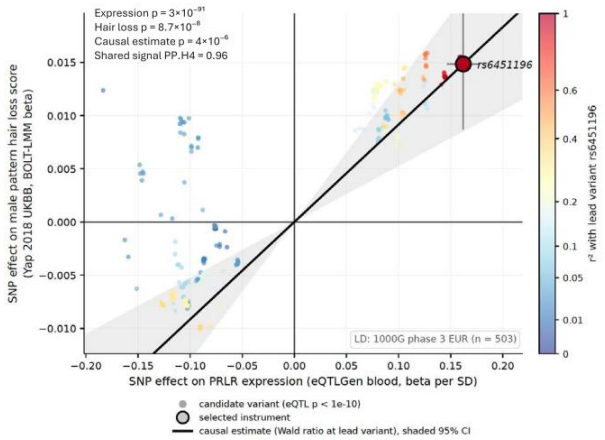
Notes:

- SNP rs6451196, 1.35 is per standard deviation; between the most extreme genotypes, G/G and A/A, it is 1.10.
- Each row is a separate logistic contrast between the grades shown, from 165,649 UK Biobank men (self-reported 1–4 scale: no, slight, moderate, severe). Rows 2 and 3 share the grade-1 reference, so the rows are not independent.

cis-MR + colocalization supports a causal relationship for PRLR in Pattern Hair Loss

- More PRLR, more proportional balding.
- The neighboring genes show no association with PHL
- The PRLR expression and hair loss signals share the same underlying genetic signal, further supports PRLR blockade as a therapeutic target.

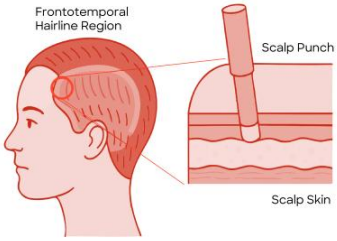
PRLR cis-MR colocalization plot



Notes

- **Instrument:** rs6451196 — 1 of 312 candidates (eQTL $p < 1\times10^{-10}$, clumped at $r^2 < 0.001$)
- **Data:** eQTLGen PRLR cis-eQTL (n = 31,644) · Yap 2018 hair loss (205,327 UK Biobank men) · 1000G phase 3 EUR (n = 503) for LD
- **Causal estimate:** Wald ratio +0.0915[+0.0526, +0.1305] score units per SD, $p = 4.2\times10^{-6}$. Strongest hair-loss association at the locus: $p = 8.7\times10^{-8}$
- **Colocalization:** PP.H4 = 0.961
- Largely the same UK Biobank men and balding scale as the previous slide, analyzed here as a continuous score — odds ratios are on that slide

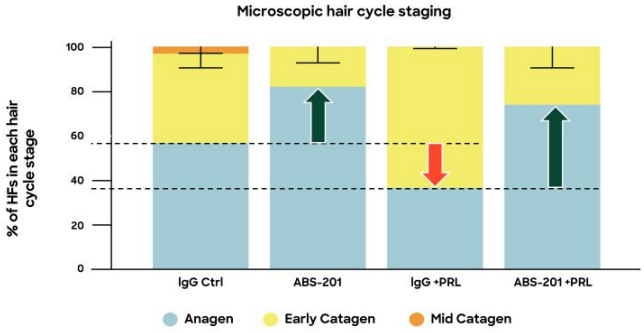
ABS-201 in human ex vivo culture study supports MOA in human scalp follicles

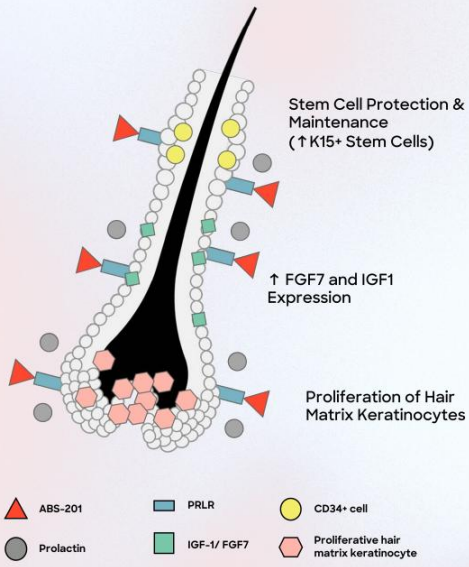


MODEL SYSTEM:

- Frontotemporal male scalp skin is the most Pattern Hair Loss affected skin region
- Organ culture is the most relevant human preclinical hair research tool ex vivo

ABS-201 significantly prolongs anagen/inhibits catagen and stimulates hair matrix proliferation





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Additional ABS-201 *ex vivo* study found:

- Prolonging anagen phase and blocking catagen, thereby inhibiting telogen effluvium
- Protecting and promoting hair follicle stem cells and and restoring CD34+ progenitor cells
- Stimulating key hair growth factors (IGF1, FGF7)
- Decreasing catagen driver TGFβ-2
- Increasing hair shaft and hair shaft keratin production

Phase 1/2a trial designed to provide readouts on safety, tolerability, and PoC in PHL

HEADLINE

Design Elements:
- Double-Blind, Placebo-controlled, FIH
- Multi-site study in Australia
- Dose range ensures predicted >90% RO

Population:
- Up to 227 male & female healthy participants
- SAD; n= 32 healthy volunteers
- MAD; n= 147 AGA subjects (Norwood Scale IIIv-V)
- Optional PHL cohorts in SAD/MAD; n= 48
- 3:1 randomization

Endpoints:
- **Primary:** Safety & Tolerability
- **Secondary:**
  - PK/PD
  - Efficacy readouts include target area hair count, width, and darkness (pigmentation)

Single Ascending Dose

Cohort 1	Cohort 2	Cohort 3	Cohort 4
150mg IV	**450mg IV**	**900mg IV**	**1800mg IV**
n=8	**n=8**	**n=8**	**n=8**

- **Initiated** December 2025
- All planned SAD cohorts **dosed**
- Interim SAD data shows study medication appears well tolerated, with favorable safety data across all blinded SAD cohorts
- Half life of at least 65 days

Multiple Ascending Dose (26 weeks)

Cohort 1	Cohort 2	Cohort 3
300mg SC	**600mg SC**	**1200mg SC**
n=49	**n=49**	**n=49**

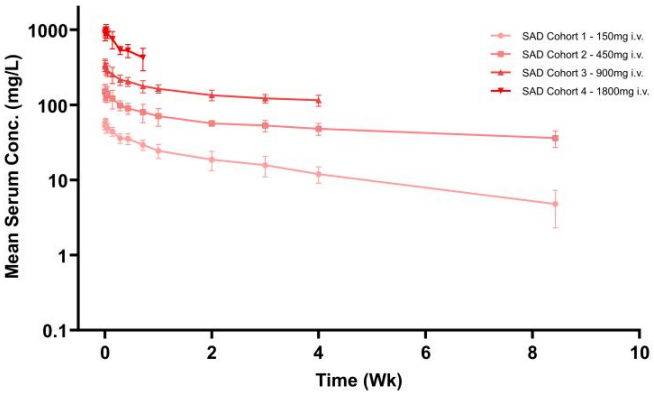
- MAD design enabling **PoC for AGA**
- **MAD Cohort 3 enrolling**
- **2H 2026:** Expected 13-week interim PoC readout
- **Early 2027:** Expected 26-week topline PoC readout

*As of May 31, 2026

Half life of >65 days at doses overcoming TMDD

PK profile supports targeted dosing interval of 2 or 3 injections over six-month period

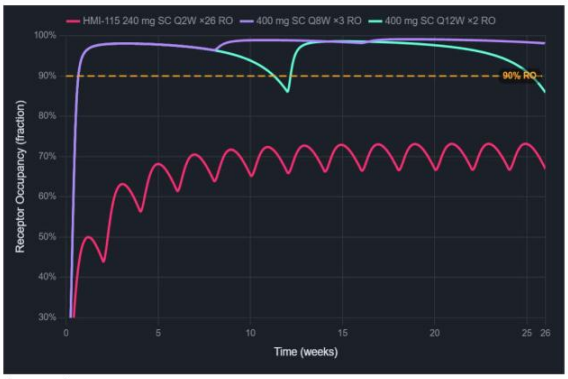
HEADLINE Trial Interim PK Data from SAD Cohorts



Log-linear regression of geometric mean concentrations from terminal phase.
Error bars: geometric SD interval.
Cut-off date: June 8, 2026

Modeling of Interim PK Data Supportive of Convenient Dosing Profile

ABS-201 current ~70% s.c. Bioavailability



Assumptions:

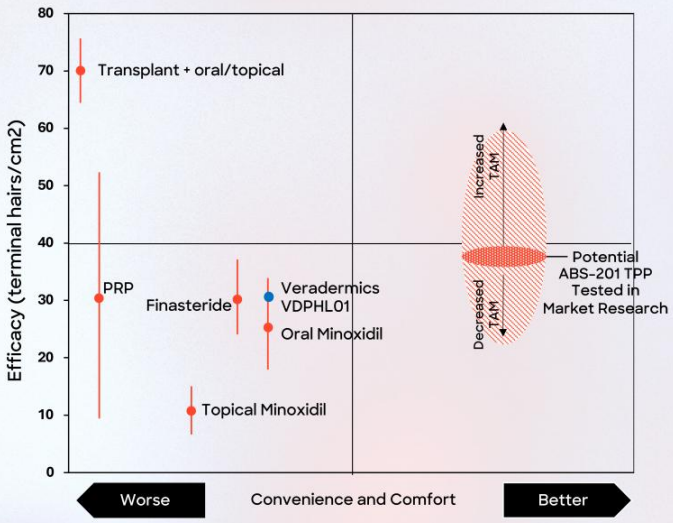
- 15% - scalp skin tissue distribution
- 55% - s.c. bioavailability derived for HMI-115 based on its phase 1 data

- Modeling of interim PK data from HEADLINE Trial supports the potential for 2-3 s.c. injections over six-month period (e.g., 400 mg/injection) to maintain> 90% Receptor Occupancy without cycling
- s.c. bioavailability of ~70% based on popPK modeling of early PK data
- Continued model refinement planned as further s.c. bioavailability data emerge from MAD cohorts

Note: *The 400mg dose shown is illustrative for modeling purposes and does not represent a final, assumed dose. Dose range finding is currently ongoing in the MAD portion of the HEADLINE trial.*

ABS-201 TPP aims to offer a new treatment category in PHL based on efficacy and convenience

- Novel, targeted regenerative hair follicle mechanism
- Convenient, infrequent pulse therapy: 2-3 subcutaneous injections over six-month period
- Potential for durable efficacy: may provide 2-3 years of hair growth
- TPP tested in market research supports total addressable market >$25B



* Based on 2-3 injections during first 6 months for >2 years of hair growth
Efficacy at 24w for Vertex terminal hair count in male subjects: Oral Minoxidil (5mg/day): Panchaprateep 2020 (10.1007/s13555-020-00448-x) and Penha 2024 (doi:10.1001/jamadermatol.2024.0284); PRP: Dervishi 2019 (10.1111/jocd.13113); Finasteride and Topical Minoxidil : Gupta 2022 (doi:10.1001/jamadermatol.2021.5743).
Transplant: based on KOL interviews.

Consumer Research Commissioned by Absci Validates Market Potential of ABS-201

Significant Unmet Need:
Driven by psycho-social impacts (loss of confidence, self-esteem) from PHL

Strong Commercial Demand:
Nearly all men and roughly 90% of women are inclined to ask their doctors about ABS-201

High Value Proposition:
Significant share of respondents willing to pay a premium for the ABS-201 TPP

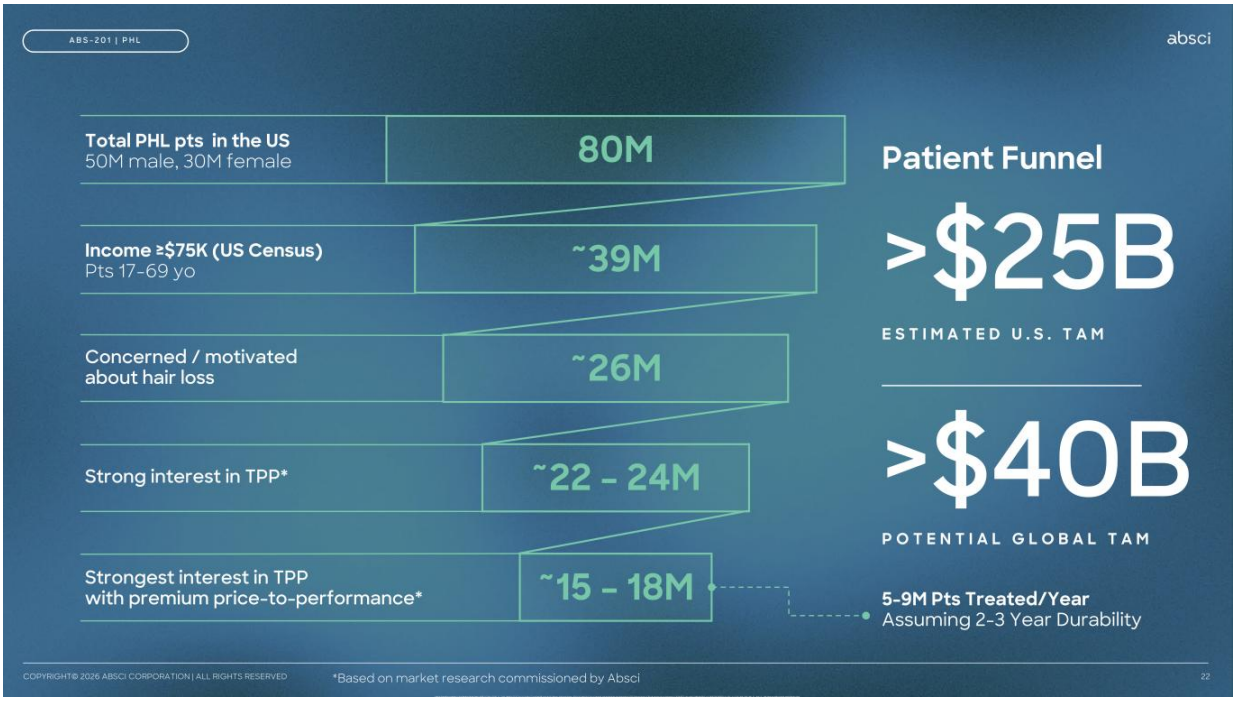
Disruptive Potential:
Over 1/3 of respondents would select ABS-201 before their current treatment, suggesting ABS-201 can effectively compete as first-line therapy

610 Participants:

306 Men | 304 Women

*ALL PARTICIPANTS EXPERIENCING HAIR LOSS

UP TO 97% MEN	UP TO 88% WOMEN	EXTREMELY OR VERY LIKELY TO ASK HCP ABOUT ABS-201
37% MEN	36% WOMEN	WOULD TRY ABS-201 FIRST (FIRST LINE)
80% MEN	81% WOMEN	REPORT NEGATIVE PSYCHOLOGICAL IMPACT


ABS-201 | PHL
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Total PHL pts in the US
50M male, 30M female
80M
Income ≥$75K (US Census)
Pts 17-69 yo
~39M
Concerned / motivated
about hair loss
~26M
Strong interest in TPP*
~22 - 24M
Strongest interest in TPP
with premium price-to-performance*
~15 - 18M
Patient Funnel
>$25B
ESTIMATED U.S. TAM
>$40B
POTENTIAL GLOBAL TAM
5-9M Pts Treated/Year
Assuming 2-3 Year Durability
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*Based on market research commissioned by Absci
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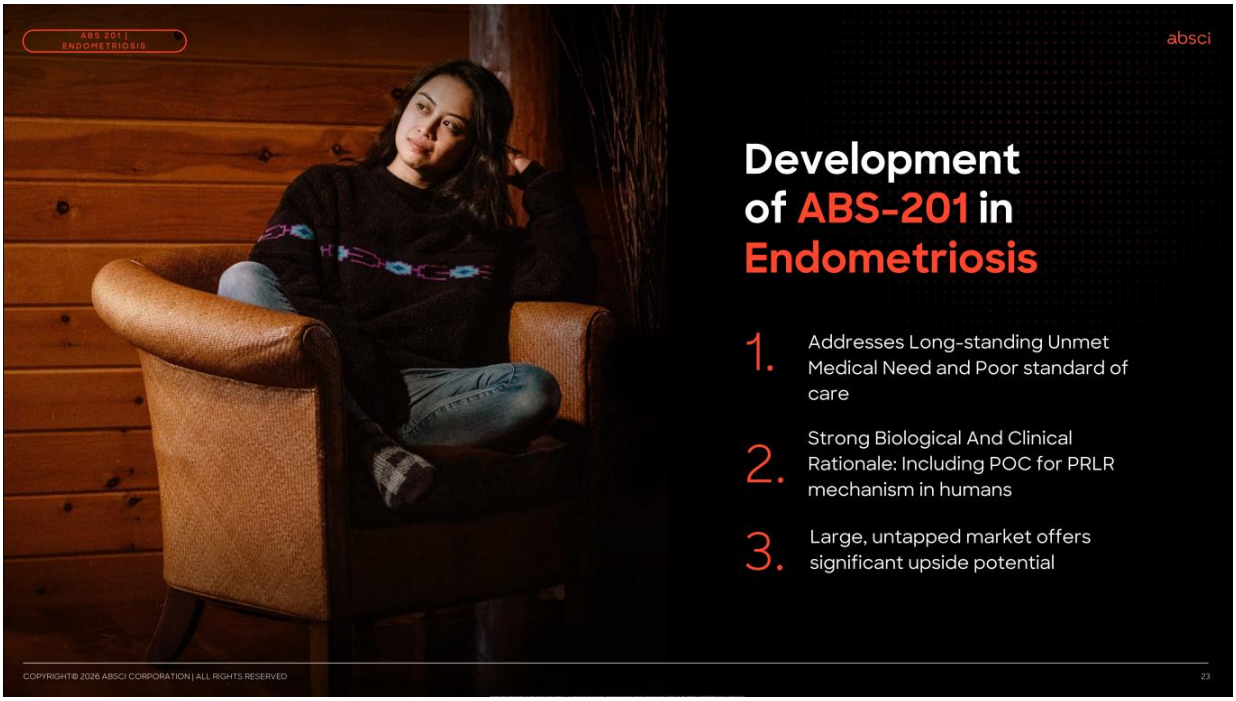
ABS 201 | ENDOMETRIOSIS
absci
Development of ABS-201 in Endometriosis
1. Addresses Long-standing Unmet Medical Need and Poor standard of care
2. Strong Biological And Clinical Rationale: Including POC for PRLR mechanism in humans
3. Large, untapped market offers significant upside potential
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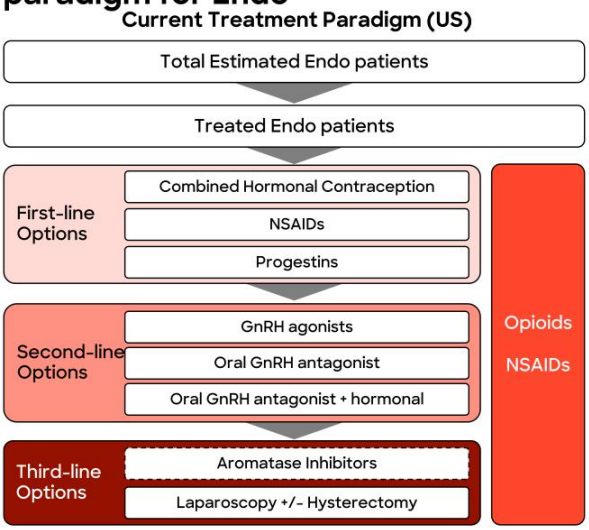
Hormonal therapies and surgical intervention make up the treatment paradigm for Endo

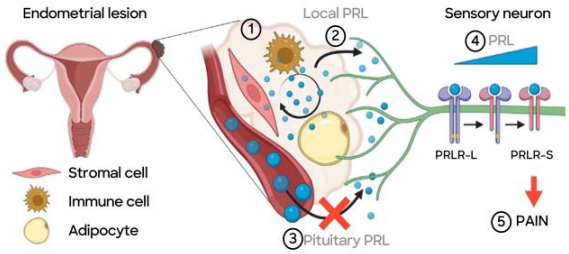


- Endo is a chronic condition with currently no medical or surgical cure
- Roughly, 75% of patients are estimated to use opioids and/or NSIADs throughout their disease course
- Up to 33% of patients do not respond to hormonal treatment alone
  - Additionally, patients will pause treatment when seeking pregnancy
- GnRH therapies are typically prescribed by Gynecologist and AE profile often limits long-term use
- Notably, aromatase inhibitors are not FDA approved for Endo, but are used off-label
- Up to 40% of Endo patients undergo a laparoscopy and 12% receive hysterectomies
- Even after hysterectomy ~15% of patients still report pain symptoms

Sources: PMID 40323608, PMID 37391793, ARTEMIS 2024 Report, GlobalData, US Census Data

PRLR antagonism is a novel and differentiated MoA in Endometriosis

PRL and PRLR play a dual role in endometrial lesion development and pain response



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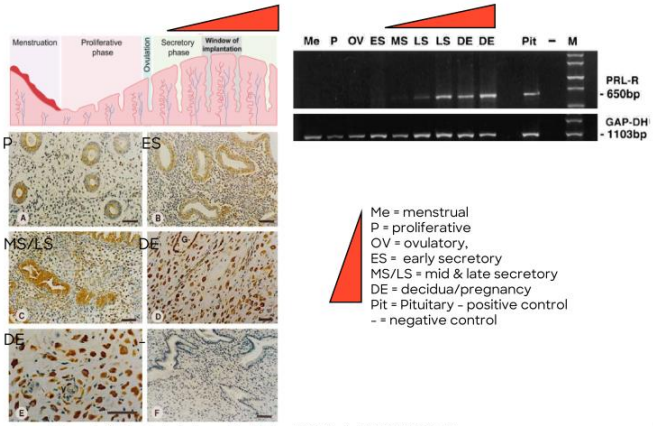
- Endometriotic lesions produce prolactin under estrogen/progesterone control.
- Excess prolactin promotes lesion growth and sensitizes pain-sensing nerves, contributing to chronic pelvic pain.
- Prolactin signaling is independent of sex-hormone pathways, offering a differentiated, non-hormonal treatment modality vs current therapies.

Sources: PMID 37169264

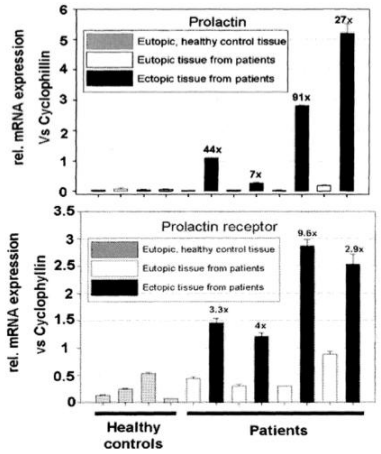
PRL and PRLR increase during secretory phase in healthy tissue, and is overexpressed in endometrium of patients with endometriosis

Localization And Temporal Expression Of Prolactin Receptor In Human Endometrium



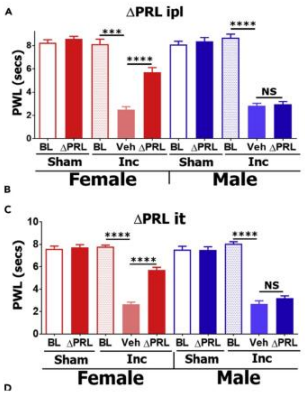
Jones et al. Journal of Clinical Endocrinology and Metabolism, 1998; Otto et al. WO 2011/069795 A4

PRL & PRLR is Elevated Ectopic Endometriotic Lesions



PRLR antagonism suppresses postoperative pain in female mice and inhibits endometriosis interna formation

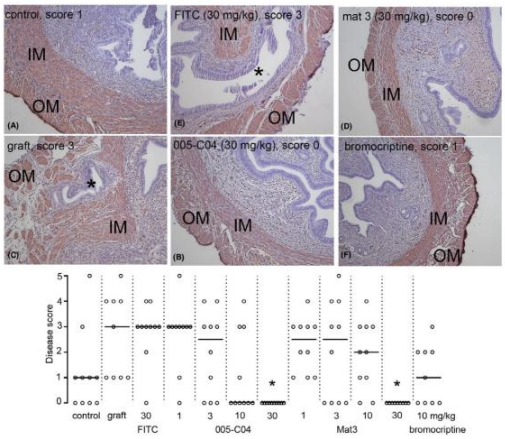
Prolactin May Regulate Pain Responses via a Female-Selective Nociceptor-Specific Mechanism



Depicted: pain incision (Inc) model for heat sensitivity & ΔPRL administration

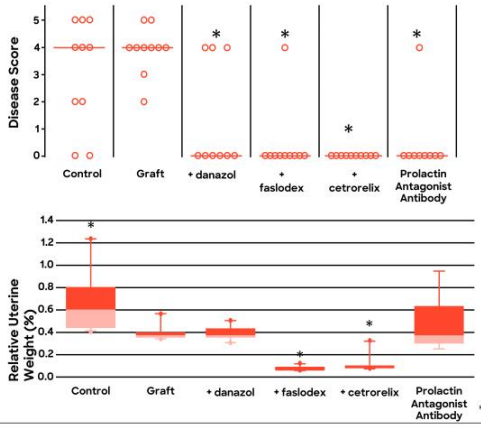
Patil et al. iScience 2019; Otto et al. Pharmacol Res Perspect. 2022

The Effects of Prolactin Receptor Blockade in a Murine Endometriosis Interna Model



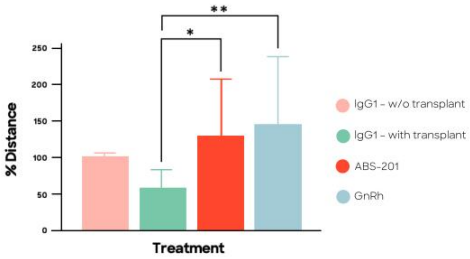
PRLR antagonism reduces lesion formation and pain in endometriosis mouse model

Prolactin inhibition decreases endometrial lesion formation in female mouse interna



*p < .05

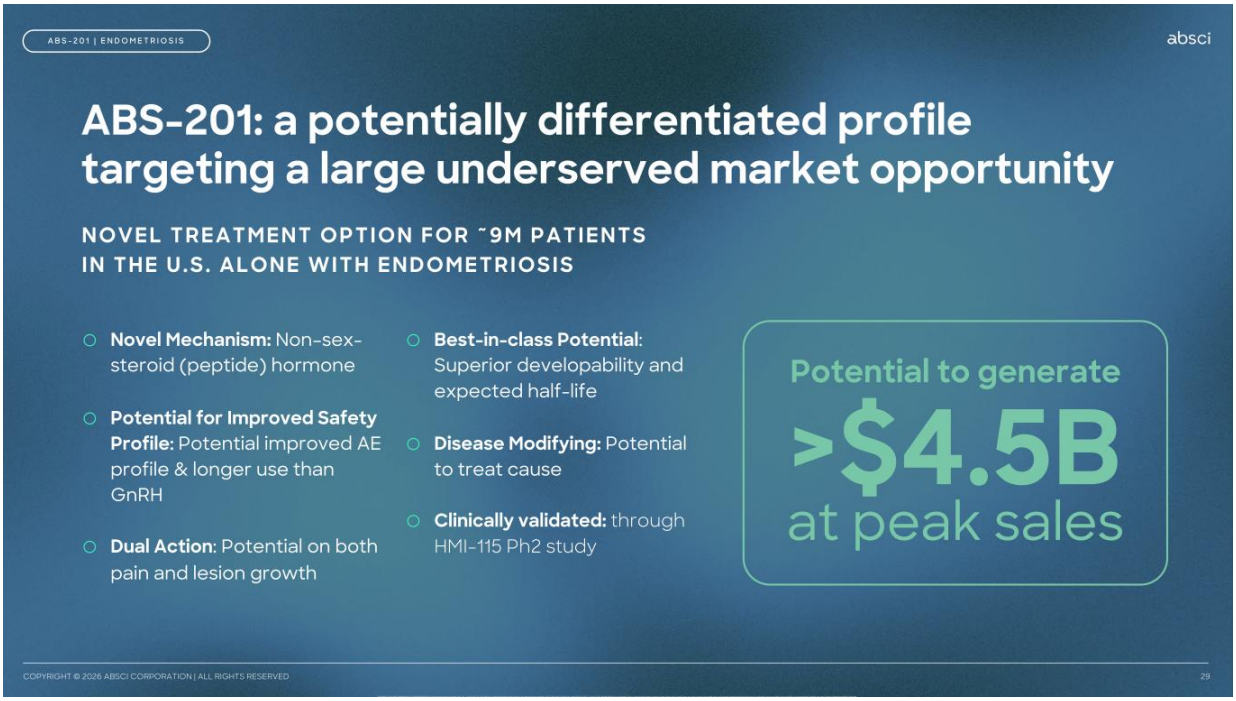
% Distance travelled at Week 7 (compared to baseline)



- ABS-201 and GnRh modulator increase distance traveled relative to placebo over time as surrogate for pain reduction

** p<0.01; *** p<0.001

Sources: Patil et al. iScience 2019
Otto et al. Pharmacol Res Perspect. 2022


ABS-201 | ENDOMETRIOSIS
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ABS-201: a potentially differentiated profile targeting a large underserved market opportunity
NOVEL TREATMENT OPTION FOR ~9M PATIENTS IN THE U.S. ALONE WITH ENDOMETRIOSIS
Novel Mechanism: Non-sex-steroid (peptide) hormone
Potential for Improved Safety Profile: Potential improved AE profile & longer use than GnRH
Dual Action: Potential on both pain and lesion growth
Best-in-class Potential: Superior developability and expected half-life
Disease Modifying: Potential to treat cause
Clinically validated: through HMI-115 Ph2 study
Potential to generate
>$4.5B
at peak sales
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Clinical Strategy guided by a leading Endometriosis Advisory Board

Hugh Taylor, MD (Chair)
Anita O'Keefe Young Professor Chair, Ob/Gyn & Reproductive Sciences, Yale School of Medicine

Joan-Carles Arce, MD, PhD
Chief Scientific Medical Officer &
Co-Founder, ReproNovo

Gaurang Daftry, MD
Chief Scientific Officer & President of Physician Relations, Inception; Adjunct Associate Professor, Yale University, Mayo Clinic

Linda Giudice, MD, PhD
Robert B. Jaffe, MD, Endowed Professor in Reproductive Sciences, Dept. of Ob/Gyn & Reproductive Sciences, UCSF

Axel Haupt, MD
Senior Vice President Clinical Investigation Diabetes, Obesity Complications, Eli Lilly & Company

Zaraq Khan, MD
Professor, Ob/Gyn, Chair, Reproductive Endocrinology & Infertility Division, Mayo Clinic

Rob Scott, MD
Former Chief Medical Officer of AbbVie; Absci Scientific Advisory Board member

Stephen Young, MD, PhD
F. Bayard Carter Distinguished Professor of Ob/Gyn; Division Chief, Reproductive Endocrinology & Infertility, Duke University

CATALYSTS

absci

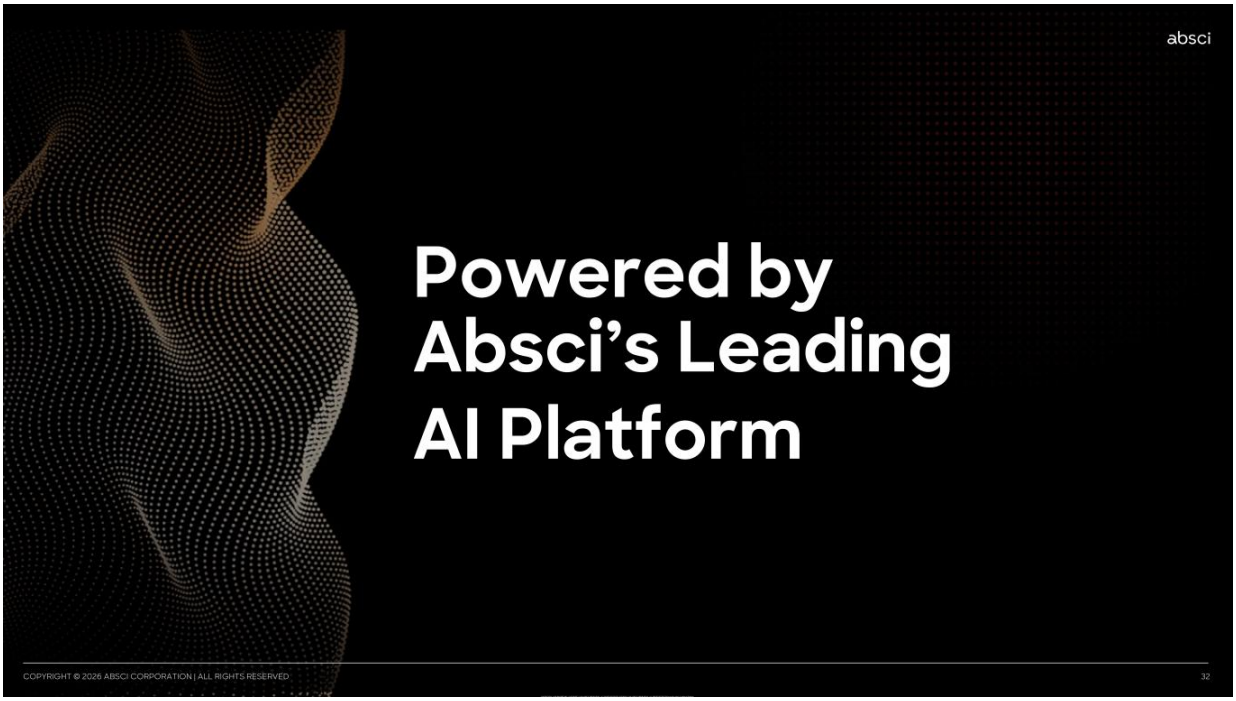
Leading AI x Bio platform driving 2 Phase 2 readouts in the next 24 months

ABS-201 in PHL

- Ph1/2a Study initiated Dec 2025
- Positive interim Safety, Tolerability, and PK readout June 2026
- Interim PoC Readout – anticipated 2H 2026

ABS-201 in ENDO

- Ph1/2a Study initiated Dec 2025
- Phase 2 initiation expected in Q4 2026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AI Platform
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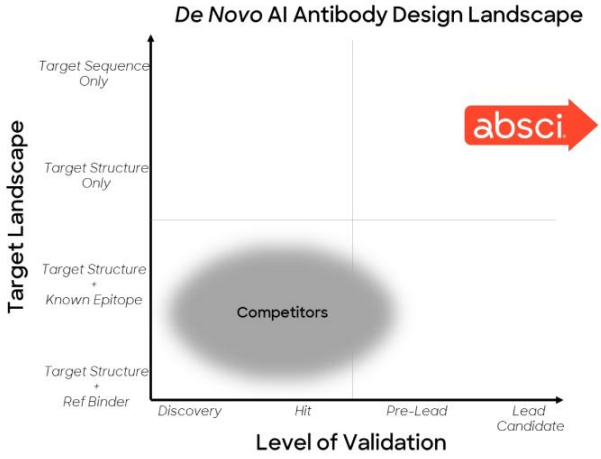
Absci's de novo AI models deliver differentiated lead candidates against challenging targets

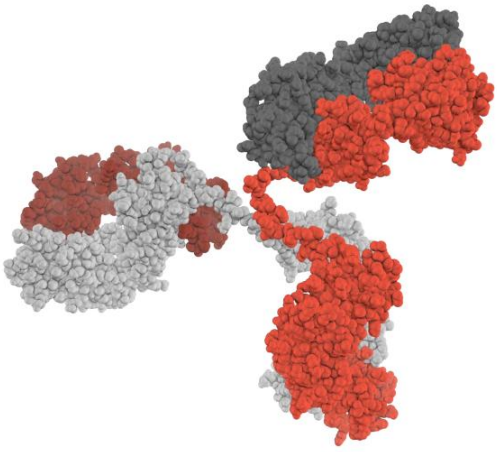


ABSCI DIFFERENTIATION

- **Address challenging targets**
  - *Only target structure or sequence required*
- ***Zero-Prior*: Design against any epitope**
  - *No known protein binder required*
  - *Interrogate multiple epitopes to achieve function (e.g. agonism)*
- **Deliver mAbs that meet therapeutic criteria***
  - *Specificity*
  - *Developability*
  - *Function*

*May include one week of AI lead optimization

We use AI to create novel & differentiated therapeutics



- EPITOPE-SPECIFIC DESIGN + EPITOPE INTERFACE OPTIMIZATION
- ENHANCED POTENCY AND MOA
- ABILITY TO ADDRESS DIFFICULT TARGET CLASSES, E.G. GPCRS
- ENABLING FEATURES: MULTI-VALENCY, pH-DEPENDENT BINDING
- POTENTIAL TO CREATE MEANINGFUL IP: 100S TO 10,000S OF FUNCTIONALLY VALIDATED SEQUENCES ENABLED BY PROPRIETARY WET-LAB VALIDATION

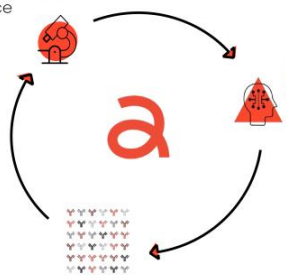
AI PLATFORM

We create experimentally validated AI technology that enables *de novo* antibody design

Wet Lab Validation

Wet Lab experiments confirm binding, epitope-specificity, developability, and function.

Wet Lab data enable assessment of model performance improvements.



Antibody Design (AbsciDesign)

(1) Generate antibody structures and sequences.

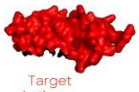
(2) Filter designs toward high-probability *in vitro* binders.

Library Design

AbsciDesign generates "libraries" of sequences that encode putative antibody binders per disease target.

Origin AI models design and optimize therapeutic antibodies

INPUT

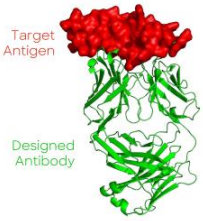


Target Antigen

1. Target structure(s)
2. Epitope(s)
3. Antibody framework(s)
4. CDR lengths

STRUCTURE & SEQUENCE DESIGN

Structure Design



Sequence Design

Design 1

HCDR1: GFNIKDTY
HCDR2: IYPTNGYT
HCDR3: SRWGGDGFYAMDY

LCDR1: QDVNTA
LCDR2: SAS
LCDR3: QQHYTTPPT

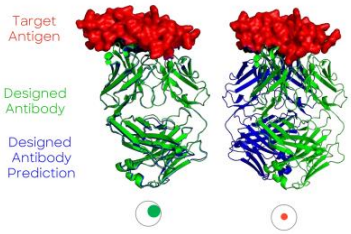
⋮

Design N

HCDR1: GFNIKDTW
HCDR2: IYPSNGYT
HCDR3: ARWGGDGFYAMDY

LCDR1: QDVNTA
LCDR2: SAS
LCDR3: QQHYTTPPT

DESIGN SCORING & FILTERING



- Score, rank, and filter designs to optimize for diversity and binding likelihood
- Leverage quality confidence metrics, energy metrics, and molecular dynamics simulations to evaluate designs

OUTPUT LIBRARY

DESIGN LIBRARY

1. DESIGN 1
2. DESIGN 2
3. DESIGN 3

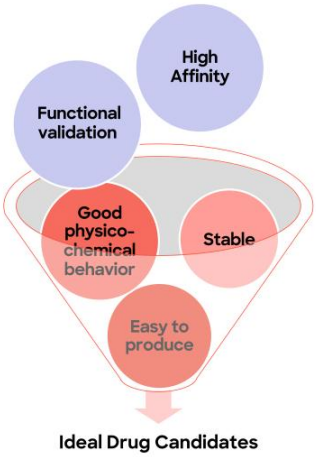
⋮

N. DESIGN N

Output: library of amino acid sequences encoding antibody binders to therapeutic target-of-interest

CDR = Complementarity Determining Region H = Heavy Chain; L = Light Chain

Lab-in-the-loop ensures AI-designed antibodies translate into drug-ready candidates



- **Screening** team confirms binding to target and affinity
- **Disease Biology** team validates functional activity
- **Analytical Development** team conducts developability assessment:
  - No self-association, hydrophobicity, or poly-reactivity
  - Appropriate melting temperature and colloidal profile, and stable upon stress conditions
- **Production team** evaluates manufacturability in CHO cells

Introducing Origin-1: an AI platform for *de novo* antibody design against zero-prior epitopes

Zero-Prior Epitope Targeting

Designed full-length mAbs against epitopes with no known protein binders or structural data in <100 designs per target

High Structural Fidelity

Cryo-EM confirmed designs at 3.0–3.1 Å resolution with DockQ 0.73–0.83, confirming high structure design accuracy

Functional Antagonist

AI-guided affinity maturation yielded 68x affinity gain for IL36RA, producing a functional antagonist at ~100 nM EC50

Origin Pipeline Components:

AbsciDiff
All-atom diffusion model

→

AbsciGen
CDR sequence design

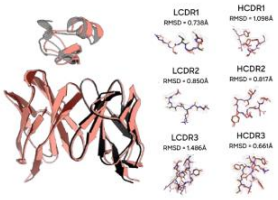
→

AbsciBind
Scoring & filtering

COL6A3

Experimental Structure
Designed Heavy Chain
Designed Light Chain
Designed Antigen

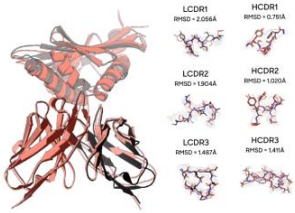
All-Atom Global RMSD = 2.56Å
Interface RMSD = 0.95Å
Ligand RMSD = 1.58Å
DockQ = 0.84Å



AZGP1

Experimental Structure
Designed Heavy Chain
Designed Light Chain
Designed Antigen

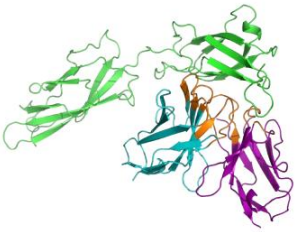
All-Atom Global RMSD = 1.79Å
Interface RMSD = 0.96Å
Ligand RMSD = 1.48Å
DockQ = 0.83



https://www.absci.com/denovo/

Absci's de novo AI models deliver differentiated lead candidates against challenging targets

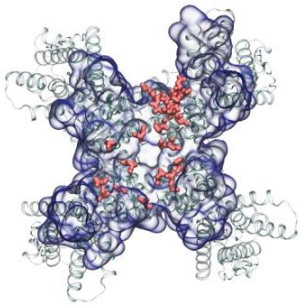
DE NOVO ANTIBODY DESIGN AGAINST TRANSMEMBRANE TARGET EPITOPE WITH NO KNOWN BINDER



Designed seven high-affinity antibodies against partner-specified epitopes on a transmembrane antigen without a known binder.

Pharma collaboration

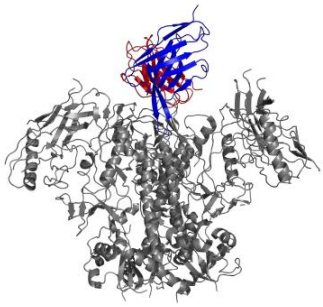
DE NOVO ANTIBODY DESIGN AGAINST CHALLENGING ION CHANNEL



Designed a pore-blocking, functional antagonist against a tetrameric membrane-embedded ion channel.

Pharma collaboration

DE NOVO ANTIBODY DESIGN AGAINST CONSERVED HIV-1 "CALDERA" EPITOPE



Designed cross-reactive, conformation-specific antibodies against the HIV-1 "Caldera" epitope.

Caltech collaboration

We use high-fidelity, customized datasets with our own AI models to enrich for developable candidates

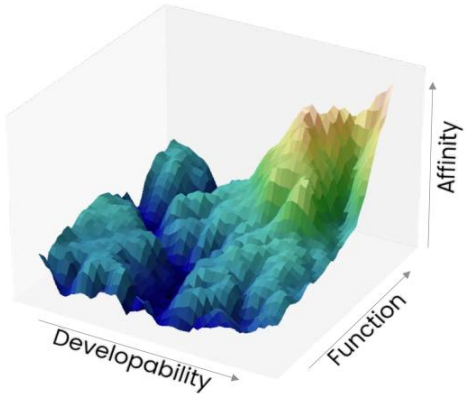
Generates **diverse**, **developable**, and **functional novel variants** within a desired target product profile (TPP):

- **Precise affinity tuning** for bi-specific arms
- **Cross-reactive** leads to support *in vivo* testing
- **Conditional** leads for optimal pharmacology

Lab-in-the-loop synergy provides strong model performance out to >10^{18} combinatorial space*

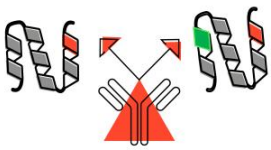
*derived from ≥10 amino acid changes at ≥24 CDR positions sampling all residues except cysteine

Landscape-wide scoring enables selection of optimal sets of sequences



Success in AI-design and optimization of multiple developability and pharmacological properties

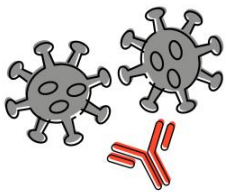
CROSS-SPECIES OPTIMIZATION



Successful design of antibodies binding to both mouse and human antigens

- Hits identified from 10^{19} combinatorial space
- Models identify hits with >175x tighter affinity and <500 pM KD to both antigens

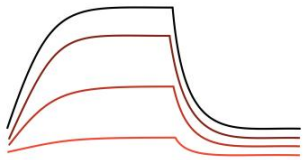
MULTI-VARIANT SPECIFICITY



Successful design of antibodies with expanded neutralizing activity vs three SARS-CoV-2 spike variants

- Tuned models identify developable hits with higher affinity to three variants, including >50x tighter affinity to previously resistant variant
- Potent neutralization activity to all three variants

PH-SENSITIVE BINDING



Successful design of pH-sensitive antibodies through sampling the entire relevant ionizable search space

- Hits show 20x to >100x pH sensitivity with favorable developability after one round

Track record of industry-leading partnerships

AI DRUG CREATION™ PARTNERSHIPS

AstraZeneca · almirall · MERCK · TWIST BIOSCIENCE · OWKIN · Memorial Sloan Kettering Cancer Center · Caltech · UCLA

SUPPORTING COMPUTE COLLABORATIONS

AMD · ORACLE · NVIDIA

25+ PARTNERED PROGRAMS TO DATE

OUR PARTNERSHIP FOCUS

- **Challenging Targets / Epitopes**
- **Differentiated TPPs**
- **Mono or Multi-specific Formats**

"Multilingual" team with expertise in AI and drug creation

EXPERTISE AND BACKGROUND FROM:

OpenAI, Google, NVIDIA, Harvard University, Stanford University, MIT, Meta, Takeda, X, AstraZeneca, Broad Institute, Bayer, Pfizer, Bristol Myers Squibb, Novo Nordisk, Philips, Microsoft, amazon

Leadership Team:

Sean McClain
Founder, CEO & Board Director

Zach Jonasson, PhD
Chief Financial Officer & Chief Business Officer

Ransi Somaratne, MD
Chief Medical Officer, Head of R&D

Shelby Walker, JD
Chief Legal Officer

Christine Lemke
SVP, Portfolio & Growth Strategy

Board Of Directors:

Frans Van Houten
Chairman of the Board
Former CEO, Royal Phillips

Sean McClain
Founder, CEO & Board Director

Sir Mene Pangalos, PhD
Former EVP R&D AstraZeneca

Mary Szela
CEO & President TriSalus Life Sciences

Joseph Sirosh, PhD
Former CVP AI Microsoft

Dan Rabinovitsj
VP Hardware Engineering, Meta

Karen McGinnis, CPA
Former Chief Accounting Officer, Illumina

Scientific Advisory Board:

Sir Mene Pangalos, PHD
Co-Chair SAB
Former EVP R&D AstraZeneca

Andreas Busch, PHD
Co-Chair SAB
Chief Innovation Officer

Ian McInnes, PHD
Vice Principal and Head of College
University of Glasgow

Luis Diaz, MD
Head, Division of Solid Tumor Oncology
Memorial Sloan Kettering Cancer Center

John Wherry, PHD
Director, Institute for Immunology & Immune Health, University of Pennsylvania

Victor Greiff, PHD
Associate Professor
University of Oslo

Rob Scott, MD
Former Chief Medical Officer, Abbvie

Absci at a Glance

140
EMPLOYEES

"Multi-lingual" AI + Drug Discovery expertise AI team drawing on experience from tech leaders:

Harvard University, Google, NVIDIA, MIT, OpenAI, Microsoft Research, Stanford University

Biologics drug discovery expertise from:

AstraZeneca, Pfizer, Takeda, Shire

77,000
SQUARE FEET

- State-of-the-art wet and dry lab in Vancouver WA
- Absci AI Research (AAIR) lab in NYC
- Innovation Centre in Zug Switzerland

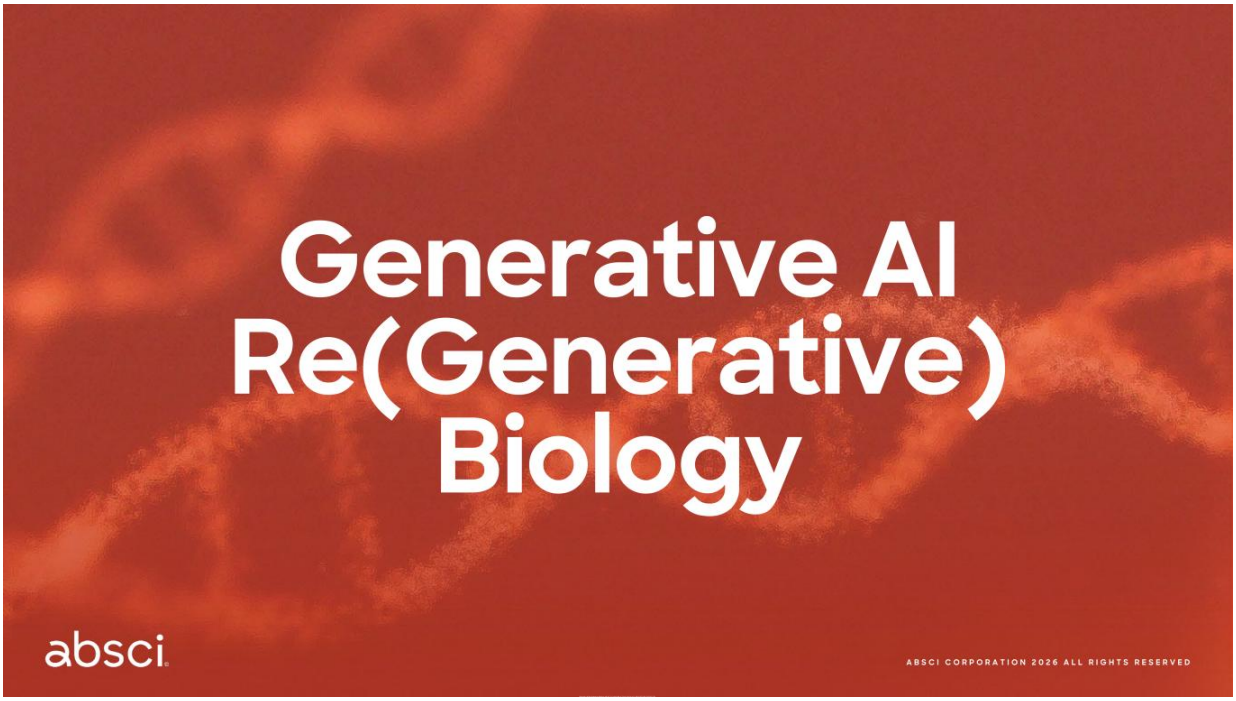
10+
PARTNERS, INCLUDING

MERCK, almirall, Memorial Sloan Kettering Cancer Center, TWIST

3
CLINICAL STAGE PROGRAMS
In Pattern Hair Loss, Endometriosis, and I&I

>$750M
CAPITAL RAISED TO DATE

*As of March 31, 2025


Generative AI
Re(Generative)
Biology
absci
ABSCI CORPORATION 2026 ALL RIGHTS RESERVED

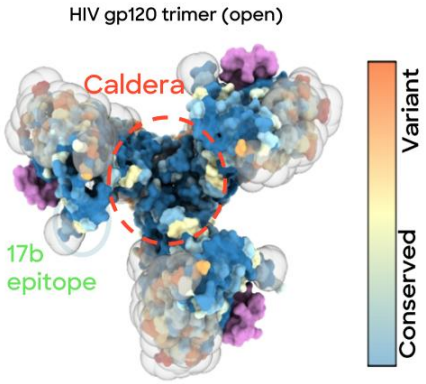
AI CASE STUDY I

de novo design of an antibody that binds the Caldera region of HIV-1 trimer

Caltech absci BILL & MELINDA GATES *foundation*

de novo design antibody that binds to the highly conserved caldera region of HIV gp120

- No natural or synthetic antibody for HIV exists today because immune system cannot derive an antibody that is universally neutralizing against HIV
- Design challenge: create universally neutralizing HIV antibody by binding unique and conserved epitope within "caldera" of open conformation of gp120 to prevent HIV from entering host cells
- Numerous attempts to target this epitope have failed-previous efforts have identified antibodies, but none bind the "caldera" and none are universally neutralizing.



HIV-Caldera: Determine inputs and design

HIV Env Trimer Challenge :

- Highly glycosylated
- Extremely high sequence diversity among isolates
- High mutation rate at common neutralizing epitopes

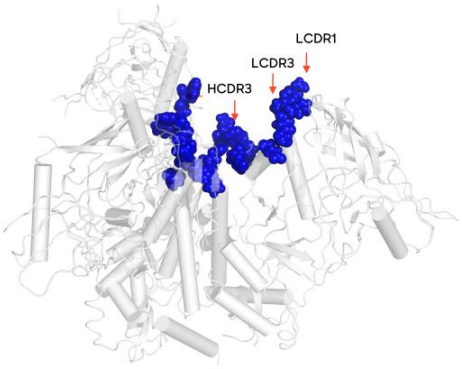
Model inputs:

1. Antigen structure
2. Framework of 17b
3. Epitope selected conserved across HIV strains (Clades A, B, and C)

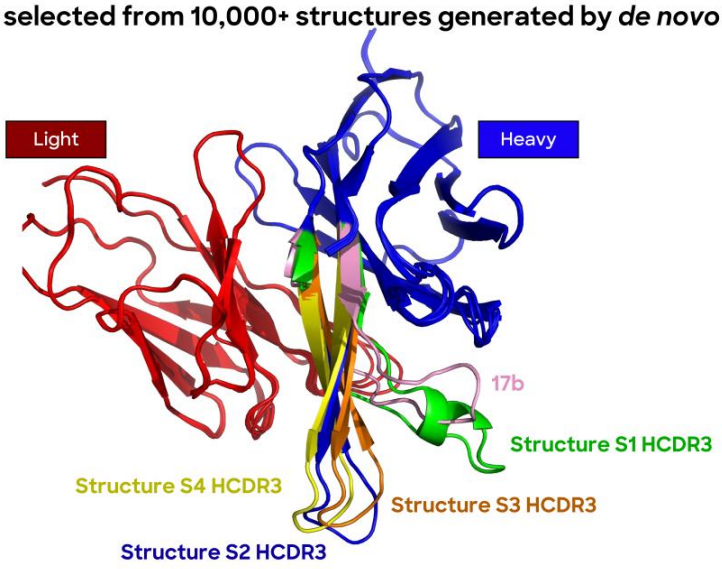
Design of CDRs:

- Condition the model to design long HCDR3s to reach into open caldera region (>20 residues)
- Designed HCDR2 and LCDR3 to bind to HIV surface

HIV Env trimer (open)

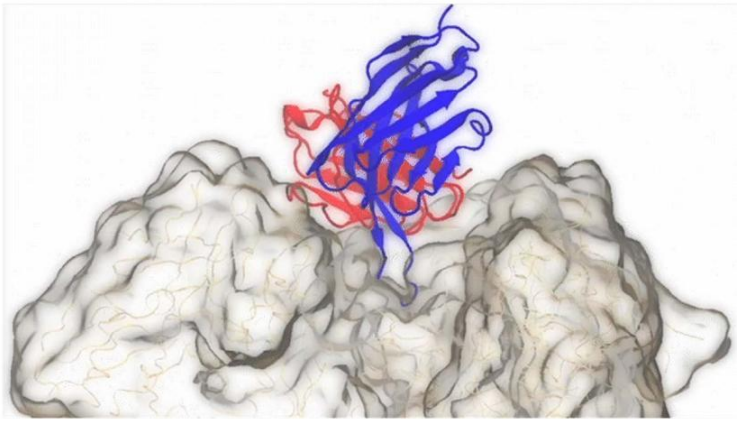


4 best structures selected from 10,000+ structures generated by *de novo* model

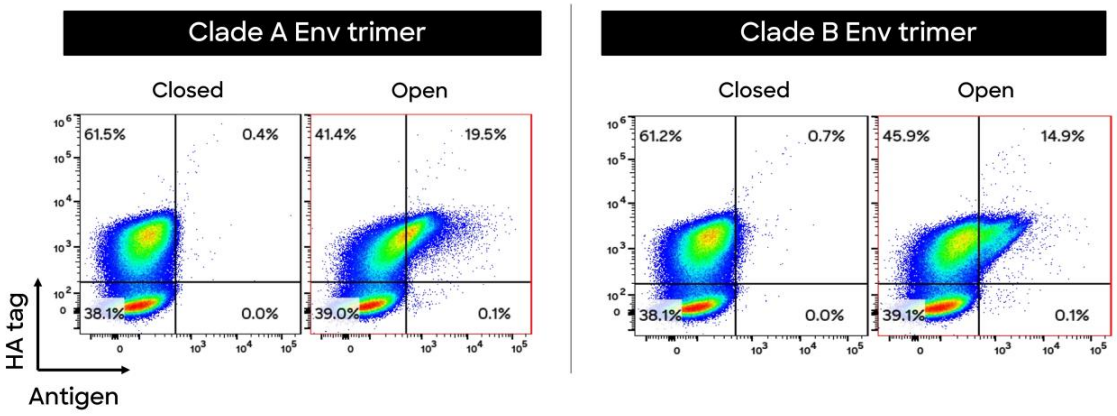


CASE STUDY #1

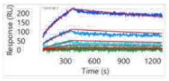
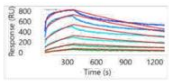
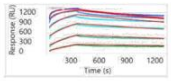
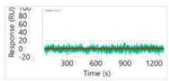
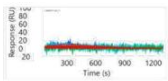
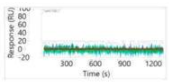
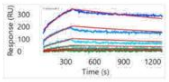
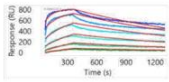
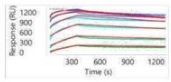
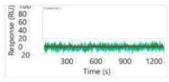
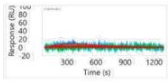
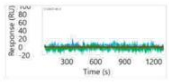
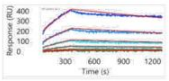
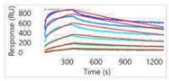
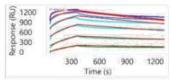
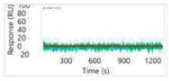
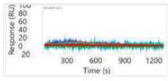
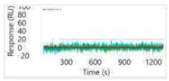
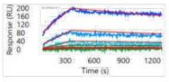
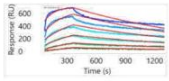
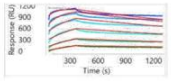
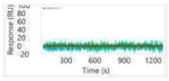
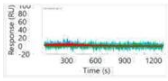
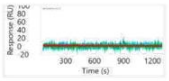
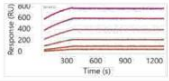
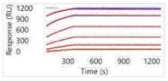
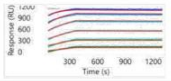
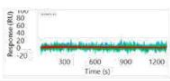
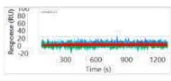
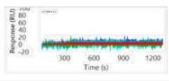
Applied molecular dynamics simulation to de novo designed antibodies



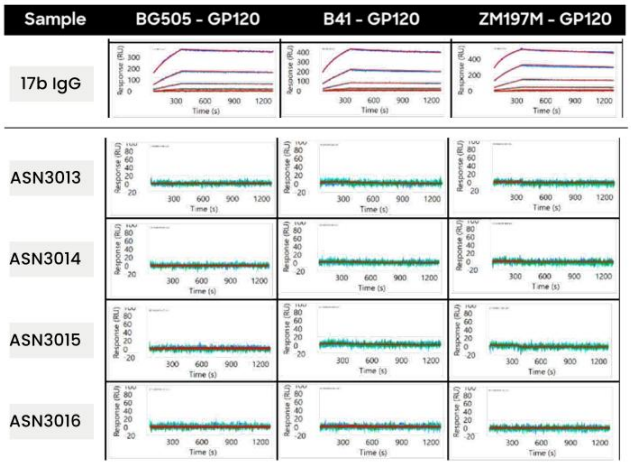
Enriched de novo library binds open, not closed, Env trimer conformation in YSD



SPR data demonstrate binding characteristics consistent with binding of caldera

Sample	BG505 – open (+CD4)	B41 – open (+CD4)	ZM197M – open (+CD4)	BG505 – closed (-CD4)	B41 – closed (-CD4)	ZM197M – closed (-CD4)
ASN3013						
ASN3014						
ASN3015						
ASN3016						
17b IgG						

HIV-Caldera: SPR demonstrates no binding of de novo designs to GP120 monomer



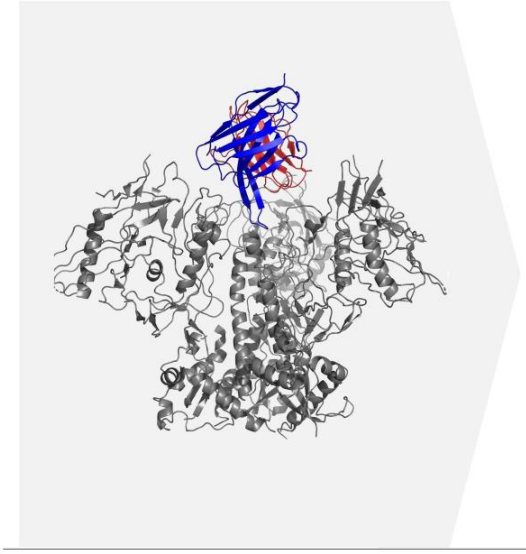
Hypothesis:

If the designed mAbs are binding to the caldera region we should not observe binding to monomeric GP120 since the caldera is only present in the Env trimer

Key results:

- ✓ 17b showed high affinity binding to monomeric GP120 as expected
- ✓ Absci mAbs showed no binding to monomeric GP120, suggesting these binders are targeting an epitope that is only present in the Env trimer

HIV-Caldera: demonstrating AI de novo design for challenging target



SUMMARY

- *de novo* design model created a novel and diverse antibody which binds multiple clades of HIV indicating successful targeting of the caldera epitope
- Screening cascade enabled selection of differentially binding variants

NEXT STEPS

- Binders from this study will be selected for affinity maturation
- Structure of *de novo* binder and epitope specificity will be experimentally solved to confirm fidelity with designed structure and targeted epitope

AI CASE STUDY II

AI Optimization for pH sensitivity

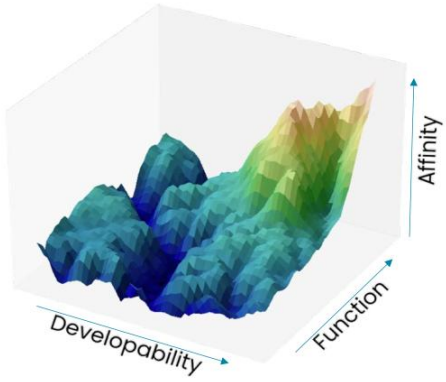
AI lead optimization platform for ‘smart biologics’

The Challenge

The diversity of antibodies is vast, making it impossible for traditional methods to explore effectively.

Absci Solution

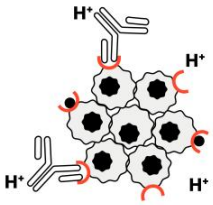
Our AI can search a space of ~10^{19}, a million times larger than traditional methods, identifying functional, developable antibodies in one step.



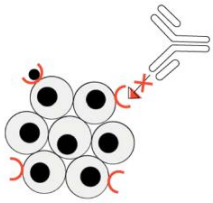
pH sensitivity may reduce toxicity and/or improve efficacy of therapeutic mAbs

Tumor specificity improves efficacy and reduces "on-target off-tumor" toxicities

Binding occurs in the acidic pH of the tumor microenvironment



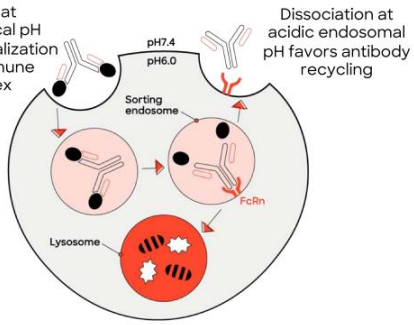
No binding occurs in the neutral pH surrounding healthy cells



Disassociation in the endosome drives antibody recycling and efficient clearance of soluble targets

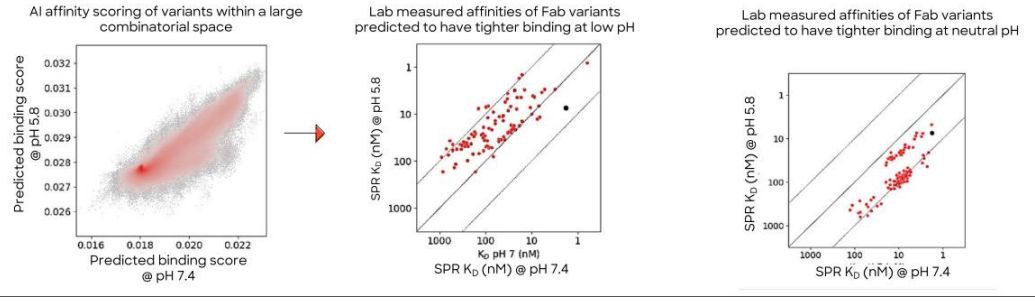
Binding at physiological pH drives internalization of the immune complex

Dissociation at acidic endosomal pH favors antibody recycling



Models identify pH sensitive Fab variants from the same lead for either indication

1. Library for model training sampled 60 positions on heavy chain framework and CDRs with up to 7 substitutions biased for ionizable residues (H, K, R, D, E)
2. Library screened for antigen binding at pH 7.4 and pH 5.8
3. Model trained and used to generate antibodies with tuned pH dependency

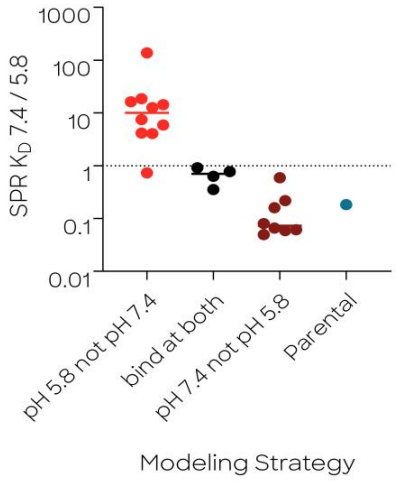


CASE STUDY #2

Hits reformatted as mAbs show desired binding profiles

SUMMARY

- AI optimized leads achieves variants with pH sensitive binding up to 100x differential
- pH-sensitive leads had no liabilities for stability, aggregation and polyreactivity[1]
- Model proposed mutations use all 6 ionizing residues in heavy chain CDRs and framework region
- Sequences were proposed from a >1013 combinatorial space



Summarized platform case studies

de novo Design

- de novo design model created molecule binds multiple clades of HIV suggesting successful targeting of the caldera epitope
-
- Represents second disclosed target success for our de novo platform in the 2nd half of this year

Absci's de novo design platform can successfully address difficult to drug target epitopes

AI Optimization

- Models identify unseen variants with 10x-20x pH sensitivity in both directions, and up to 100x differential compared to parental molecule after only one round
- Designed leads had no liabilities indicating the ability to successfully search a fitness landscape

Absci's lead optimization platform enables molecules with differentiated pharmacology