Absci Reports New Human Ex Vivo Data Demonstrating That ABS-201™ Stimulates Hair Growth and Regenerates Stem Cell Niche to Potentially Reverse Follicle Miniaturization

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Inhibiting prolactin receptor (PRLR) signaling with the ABS-201 anti-PRLR antibody promotes human hair follicle growth ex vivo

Human ex vivo *data validate ABS-201's potential to reverse follicular miniaturization and drive vellus-to-terminal hair regeneration by demonstrating that it prolongs anagen, stimulates keratin synthesis, and modulates the stem cell niche*

Full dataset will be presented during today's ABS-201 Key Opinion Leader (KOL) seminar

VANCOUVER, Wash. and NEW YORK, Dec. 11, 2025 (GLOBE NEWSWIRE) -- Absci Corporation (NASDAQ: ABSI), a clinical-stage biopharmaceutical company advancing breakthrough therapeutics with generative AI, today unveiled new preclinical data for ABS-201, an AI-designed antibody targeting the prolactin receptor. The data, generated using translational human *ex vivo* scalp models, demonstrate that ABS-201 effectively stimulates hair growth by regenerating the stem cell niche as well as promoting additional key growth modulators.

The findings will be presented today at Absci's ABS-201 KOL seminar – interested parties may register for the virtual event via this link.

"Today's standard treatment options for androgenetic alopecia (AGA) do not target one of its root causes, the reduced capacity of hair follicle stem cells to generate progenitor cells, and largely ignore the role of other hormones than androgens in this form of hair loss," said Professor Ralf Paus, M.D., D.Sc., F.R.S.B., Research Professor of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine. "Our study provides the first evidence that antagonizing prolactin signaling with ABS-201 could open a radically new chapter in future AGA management."

Key Data Highlights

These studies were conducted in organ-cultured, full-thickness human scalp skin derived from male donors, a model considered highly predictive of clinical response, to assess the efficacy of ABS-201 in modulating prolactin-induced transition from the anagen (active growth) phase to the catagen (regression/apoptosis) phase. Mechanistically, ABS-201 treatment significantly inhibited the PRLR signaling pathway (STAT5 phosphorylation).

This inhibition correlated with:

- **Prolongation of Anagen and Restoration of Growth Signaling:** ABS-201 prolongs anagen by blocking catagen, promoting hair matrix keratinocyte proliferation, and increasing the hair follicle production of the potent hair growth-stimulatory growth factors IGF1 and FGF7.
- **Preservation and Expansion of Stem Cell Niche:** ABS-201 uniquely protects and expands the hair follicle progenitor cell pool, specifically by inhibiting the prolactin-induced apoptosis of K15+ stem cells while increasing their proliferation and capacity to generate CD34+ progeny. The preservation of the CD34+ progenitor pool is particularly distinct, as the reduction of these cells is a hallmark of androgenetic alopecia pathophysiology.
- **Potential for Follicle Reconversion:** In combination, anagen prolongation, hair shaft keratin stimulation, and the stem cell effects of ABS-201 facilitate the reconversion of vellus to terminal hair follicles, suggesting a disease-modifying mechanism distinct from the current treatment options.
- **Activity in Endogenous Settings:** ABS-201 also demonstrated growth-promoting effects in the absence of exogenous prolactin, indicating effective neutralization of intrafollicular prolactin. This mechanism suggests that ABS-201 could be efficacious in any individual with active PRLR signaling, whether driven by local or systemic prolactin concentrations, in combination with local PRLR expression.

"Our data confirm that prolactin signaling is much more important in human hair growth regulation than widely appreciated," added Professor Paus. "We demonstrate that ABS-201 protects and increases the hair follicle stem and progenitor cell pool, specifically by inhibiting the prolactin-induced apoptosis of K15+ stem cells while increasing their capacity to generate CD34+ progeny. Importantly, ABS-201 also lengthens anagen, the growth phase of the hair cycle, and stimulates hair shaft and hair keratin production as well as the production of key growth factors that promote hair growth. In combination, this unique spectrum of ABS-201 activities promises to reduce AGA-associated hair loss and facilitate the reconversion of miniaturized (vellus) into large terminal hair follicles in AGA."

Together, data from these studies further validate the anti-PRLR mechanism in androgenetic alopecia. Detailed data are available in a slide presentation posted to Absci's investor relations website today.

About ABS-201 and Androgenetic Alopecia

Androgenetic alopecia, commonly known as male-pattern or female-pattern hair loss, affects approximately 80 million Americans. The condition causes crown balding and receding hairlines in men, and progressive hair thinning in women. Currently, the only FDA-approved treatments – minoxidil and finasteride – show limited efficacy and notable side effects, leaving patients with limited therapeutic options.

ABS-201 represents a novel therapeutic approach targeting prolactin receptors to stimulate hair follicle regeneration and promote durable hair regrowth as demonstrated in *in vivo* studies. In preclinical studies, the antibody demonstrated statistically significant superior hair regrowth compared to minoxidil in a preclinical mouse model. Absci anticipates an interim data readout from its Phase 1/2a HEADLINE™ study in the second half of 2026.

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 an AI Research Lab in New York City, and Innovation Center in Switzerland. Learn more at www.absci.com or follow us on LinkedIn (@absci), X (@Abscibio) and YouTube.

Absci 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) Absci's strategy, goals, anticipated financial performance and the sufficiency of its cash resources; (iv) regulatory submissions and authorizations, including timelines for and expectations regarding any anticipated regulatory agency decisions; (v) the expected benefits of its collaborations with partners; and (vi) 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.

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