Baylink Presents New Preclinical Data At The American Association For Cancer Research (AACR) Annual Meeting

PALO ALTO, CA, UNITED STATES, April 25, 2025 /EINPresswire.com/ -- Preclinical results for lead ADC candidate BLB-101 for Claudin 6/9+ tumors supports potential best-in-class profile.
Data presented demonstrating Baylink's innovative ADC linker technology is overcoming major challenges in ADC development.

Baylink Biosciences presented data from its Antibody Drug Conjugate portfolio at the American Association for Cancer Research (AACR) Annual Meeting in Chicago, IL. The data presented for BLB-101, an antibody drug conjugate targeting Claudin 6 and 9 delivering exatecan with potential for best-in-class profile. In addition, Baylink presented data demonstrating its novel next-generation ADC linker technology is able to overcome key challenges in ADC development.

"The data presented today at AACR provides strong evidence of BLB-101's best-in-class profile. We believe BLB-101 is the only ADC with dual targeting of Claudin 6 and 9, with the ability to impact heterogenous tumors and benefit more patients with ovarian and other CLDN6/9+ tumor types. We plan to file an IND for this exciting candidate in 2026," said Alice Chen, PhD, Chief Scientific Officer and Founder of Baylink. "In addition, our scientists presented data at the meeting showcasing our innovative linker technology which has been designed to overcome a number of key challenges in the ADC field. In particular, our linker technology enables the delivery of new payload classes such as degraders and the delivery of two modalities in a dual payload ADC format, approaches that we believe will help to overcome resistance to chemotherapy, a significant unmet need."

Presentation Highlights
Preclinical evaluation of BLB-101, a topoisomerase-inhibitor-based anti-CLDN6/9 antibody-drug conjugate featuring a proprietary hydrophilic linker

Poster number 1578
Session Date and Time: April 28, 2025, 9:00 AM - 12:00 PM

BLB-101 is an antibody drug conjugate designed to target Claudin 6/9 and deliver the topoisomerase 1 inhibitor, exatecan in a highly efficient manner with a drug to antibody ratio of 8. Claudin 6 (CLDN6) is a tight junction protein that is highly expressed in various human cancers, including ovarian cancer, endometrial cancer, and non-small cell lung cancer (NSCLC), but is absent in normal adult tissues. Claudin 9 (CLDN9), which shares high homology with CLDN6, exhibits a similar expression pattern—being nearly undetectable in normal tissues but upregulated in ovarian and endometrial cancers. The compelling preclinical activity profile supports BLB-101 development for Claudin 6/9 positive tumors. An investigational new drug submission is planned for 2026.

Key Results:
We successfully identified a high-affinity antibody, 2D5S, that specifically binds to CLDN6 and CLDN9 while avoiding interaction with other Claudin family members. BLB-101 is an antibody-drug conjugate (ADC) candidate that incorporates 2D5S (CLDN6/9 Ab) and the topoisomerase I inhibitor, exatecan as payload, along with our proprietary hydrophilic linker, BL001. BLB-101 demonstrates excellent biological activity, favorable in vivo pharmacokinetics (PK), and excellent developability. It exhibits strong cytotoxic effects across multiple antigen-positive cancer cell lines. In xenograft models expressing CLDN6 or CLDN9, BLB-101 achieved tumor elimination at low doses. Additionally, BLB-101 was well tolerated in non-human primates. Collectively, these findings provide strong support for the continued clinical development of BLB-101.

- 2D5S Ab binds with high affinity to CLDN6 and CLDN9 while sparing other claudin family members.
- 2D5S demonstrates stronger internalization compared to a benchmark antibody.
- BLB-101 is a DAR8 ADC featuring a topoisomerase 1-inhibitor-based payload with a proprietary hydrophilic linker, BL001.
- BLB-101 exhibits strong in vitro cytotoxic and bystander killing effects.
- In xenograft models, BLB-101 treatment resulted in robust tumor elimination at dose as low as 1 mg/kg.
- BLB-101 demonstrated outstanding plasma stability and favorable PK in cynomolgus monkey.
- BLB-101 is well-tolerated in cynomolgus monkeys up to 40 mg/kg, suggesting an extended therapeutic window.

A linker platform for antibody drug conjugates (ADCs): expanding the therapeutic window
Poster number 7463
Session Date and Time: April 30, 2025, 9:00 AM - 12:00 PM

Key Results:
Our novel linker designs offer significant advantages, with features that could expand the therapeutic window of current ADCs by improving their hydrophilicity and stability, and reducing

off–target effects while maintaining efficacy. The linkers have been applied to several projects with the frontrunner project scheduled to enter a phase 1clinical trial in 2026. We are also expanding the utility of this class of linkers to enable innovative design of dual–payload–ADC and Degrader–Antibody–Conjugates.

- Baylink's proprietary linker BL001 improves hydrophilicity and stability of ADC
- BL001 linker reduced non-specific uptake of ADC into non-cancerous cells via macropinocytosis
- BL001 linker utilized in a trastuzumab exatecan ADC showed superior antitumor effect to GGFG based ADC delivering Dxd.
- BL001 linker utilized in BLB-101 candidate showed excellent PK and tolerability in cynomolgus monkeys, predicting an enhanced therapeutic index.

Copies of the poster presentations will be available on the Baylink Biosciences website at www.Baylinkbio.com/blog following the AACR meeting.

About Baylink Biosciences
Baylink Biosciences is an innovation driven biopharma company focused on development of transformative therapeutics to treat cancer. Baylink is developing a portfolio of next generation antibody drug conjugates with innovation and precision to enable the next wave of breakthrough medicines. Baylink's approach leverages a technology platform of novel linkers combined with innovative payloads to build highly differentiated products for treatment of cancer. For more information visit www.baylinkbio.com

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