# Antengene Presents Promising Results from Four Preclinical Studies at the 2022 Society for Immunotherapy of Cancer Annual Meeting

- ***Oral presentation*** *highlights preclinical data with* ***ATG-031, an in-house discovered anti-CD24 monoclonal antibody,*** *tracking to an investigational new drug (IND) filing in H1:2023*
- *Three* ***poster presentations*** *showcase preclinical data with three programs developed or discovered in-house,* ***ATG-101, a PD-L1/4-1BB bispecific antibody (in Phase I studies), ATG-018, an ATR inhibitor (in Phase I studies), and ATG-027, a B7H3/PD-L1 bispecific antibody (in preclinical testing)***
- *Antengene has global rights to these pipeline assets*

Shanghai and Hong Kong, PRC, November 11, 2022 -- Antengene Corporation Limited ( **"Antengene"** SEHK: 6996.HK), a leading innovative, commercial-stage global biopharmaceutical company dedicated to discovering, developing and commercializing first-in-class and/or best-in-class therapeutics in hematology and oncology, today announced that **it has presented posters from preclinical studies of four pipeline assets, ATG-031, ATG-101, ATG-018, and ATG-027 at the 37th Society for Immunotherapy of Cancer Annual**

上海市长宁区中山西路 1065 号 SOHO 中山广场 B 座 1206-1209 室
Suite 1206-1209, Building B, SOHO Plaza, 1065 West Zhongshan Road, Shanghai 200051, China
Tel: (86) 021 3250 1095
Fax: (86) 021 3250 1062
www.antengene.com

**Meeting (SITC 2022),** taking place on November 8-12, in Boston, Massachusetts (the United States), via in person/virtual attendance. As the world's largest and most anticipated academic gathering in the field of immuno-oncology, the SITC Annual Meeting is designed to promote scientific exchanges and cooperation for improving treatment outcomes for cancer patients.

"We are very pleased to share this segment of our early stage portfolio with the oncology community. This year's presentations highlight the breadth of Antengene's internal research capabilities, evidenced by agents based on different modalities, including small molecules, monoclonal antibodies and bi-specific antibodies," said **Dr. Jay Mei, Antengene's Founder, Chairman and CEO.** "These programs have shown promising data across a range of cell-based assays to confirm target affinity, appropriate in vitro cell and immune activation and strong *in vivo* anti-tumor activity, with differentiated performance compared to bench-mark compounds, as well as our growing expertise in the identification and validation of biomarkers and companion diagnostics to guide and support clinical development."

**Oral Presentation**

**ATG-031 (anti-CD24 monoclonal antibody)**

**Title:** ATG-031, a first-in-class anti-CD24 antibody, showed potent preclinical anti-tumor efficacy by blocking "don't-eat-me" signal

**Abstract#:** 482

By overexpressing anti-phagocytic surface proteins, often known as "don't eat me" signals, cancer cells can evade macrophage-mediated elimination. CD24, a GPI-anchored, highly glycosylated surface protein interacting with Siglec-10 on innate immune cells, was reported to be a novel "don't eat me" protein. CD24 is over-expressed in multiple tumor types. And unlike CD47, another well-known "don't eat me" target, CD24 is not expressed on human red blood cells (hRBC). ATG-031 is a first-in-class, humanized anti-CD24 antibody. ATG-031 potently binds to CD24-postive tumor cells, while showed no binding with hRBC. ATG-031 blocks the interaction between CD24 and Siglec-10 and induces potent macrophage-dependent tumor cell phagocytosis. Upon phagocytosis, M2 macrophages start to release M1-like cytokines suggesting a repolarization from M2 macrophages to M1 macrophages. ATG-031 significantly inhibited *in vivo* tumor growth and demonstrated synergism with immune checkpoint inhibitor (ICI) and

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chemotherapies. ATG-031 was well tolerated in preclinical toxicity studies in non-human primates. Also, a companion diagnostic antibody has been developed by Antengene as a patient selection tool.

In conclusion, these findings support further evaluation of ATG-031 in mono or combination therapy settings for patients with solid tumors or hematologic cancers. The Company intends to file an IND for ATG-031 in H1:2023.

**Poster Presentations**

**ATG-101 (PD-L1/4-1BB bispecific antibody)**

**Title:** ATG-101, a tetravalent PD-L1×4-1BB BsAb, demonstrates potent *in vivo* anti-tumor efficacy in Immune Checkpoint Inhibitor (ICI)-resistant or refractory mouse tumor models

**Abstract#:** 1150

ATG-101's anti- "ICI-resistant or refractory tumors" activity was assessed in both in vitro and *in vivo* models. In the presence of PD-L1 positive cells, ATG-101 enhanced the IL2 and INF-γ production by the terminally exhausted T cells and progenitor exhausted T cells.

The *in vivo* efficacy of ATG-101 was tested in 4-1BB humanized mouse bearing syngeneic B16F10 (Melanoma), EL4 (Lymphoma) or Pan02 (Pancreatic) tumors, all of which have been suggested to be ICI-resistant. ATG-101 was well tolerated and significantly inhibited tumor growth compared with control group. Furthermore, ATG-101 induced growth inhibition or regression in MC38 tumors that had progressed on atezolizumab, revealing a significant survival advantage over atezolizumab or the control group. TIL analysis suggested that ATG-101 increases the infiltration, proliferation and activation of $CD8^+$ T cells, the infiltration of natural killer T cells and the CD8+/Treg ratio in TILs.

In conclusion, by cross linking 4-1BB with PD-L1, ATG-101 has the potential to activate exhausted T-cells and overcome ICI resistance. As the first PD-L1/4-1BB bispecific antibody entering clinical development in Australia, ATG-101 is currently being evaluated in a Phase I study in Australia, China, and the U.S.

**ATG-018 (ATR small molecule inhibitor)**

**Title:** Discovery of blood pharmacodynamic biomarkers for ATR inhibitors

**Abstract#:** 76

Antengene presented the results of studies to identify validated PD biomarkers based on Antengene ATR's inhibitor, ATG-018. To demonstrate this, Antengene first evaluated gene expression changes induced by ATG-018 on human peripheral blood mononuclear cells (PBMCs) by assessing PBMCs from three donor samples treated with different concentrations of ATG-018. NanoString technology was used to develop a high throughput gene expression profile at the transcriptome level. This work was validated by treating wild type mice with ATG-018 to define the expression of PD markers in plasma using Meso Scale Discovery's technology. Through these studies, results showed that ATG-018 inhibited the expression of a set of chemokine genes (CCL2, CCL3/1 and CCL4) and that they could be detected in unmanipulated blood samples.

In conclusion, the expression of three chemokine genes that were inhibited by ATG-018 could have potential as clinically-relevant peripheral blood PD biomarkers to guide the development of ATG-018 and other ATR inhibitors in the clinic.

**ATG-027 (B7H3/PD-L1 bispecific antibody)**

**Title:** ATG-027, a first-in-class B7-H3/PD-L1 bispecific antibody,

shows potent T cell activation capability and *in vivo* anti-tumor efficacy

**Abstract#:** 1397

ATG-027 is a B7-H3/PD-L1 bispecific antibody which enables key immune effects including immune checkpoint blocking, antibody-dependent cytotoxicity (ADCC) andand antibody-dependent cellular phagocytosis (ADCP). In the poster, results were presented from *in vitro* studies to evaluate the immune function and *in vivo* studies to assess the anti-tumor efficacy of ATG-027 using mice bearing syngeneic colorectal cancer cells overexpressing human B7-H3. Results showed that ATG-027 binds to B7-H3 and PD-L1 expressing cells with high affinity. ATG-027 demonstrated higher ADCC and ADCP activity compared with anti-PD-L1 and anti-B7-H3 parental antibodies. Interestingly, in a Mixed Lymphocyte Reaction (MLR) experiment to assess the T cell activation, ATG-027 and the B7-H3 parental antibody induced robust IL-2 and IFNγ production, indicating T cell activating function of tested antibodies. Besides, ATG-027 can potently block PD1/PD-L1 interaction. At *in vivo* studies, ATG-027 demonstrated superior anti-tumor activity compared to individual parental antibodies and induced tumor shrinkage or complete regression.

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In conclusion, ATG-027's dual functionality, from binding both B7-H3 and PD-L1, shows promising anti-tumor efficacy in preclinical models by enabling T-cell activation and powerful immune properties, ADCC and ADCP.

**About Antengene**

Antengene Corporation Limited ( **"Antengene"** , SEHK: 6996.HK) is a leading commercial-stage R&D-driven global biopharmaceutical company focused on the discovery, development, manufacturing and commercialization of innovative first-in-class/best-in-class therapeutics for the treatment of hematologic malignancies and solid tumors, driven by its vision of **"Treating Patients Beyond Borders" .**

Since its founding in 2017, Antengene has built a broad and expanding pipeline of 15 clinical and preclinical assets, including 10 assets with global rights and 5 with rights for Asia Pacific markets including the Greater China region. To date, Antengene has obtained 26 investigational new drug (IND) approvals in Asia and the U.S., and submitted 6 new drug applications (NDAs) in multiple Asia Pacific markets, with the NDA for XPOVIO® (selinexor) already approved in

mainland China, Taiwan, South Korea, Singapore and Australia.

**Forward-looking statements**

The forward-looking statements made in this article relate only to the events or information as of the date on which the statements are made in this article. Except as required by law, we undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events. You should read this article completely and with the understanding that our actual future results or performance may be materially different from what we expect. In this article, statements of, or references to, our intentions or those of any of our Directors or our Company are made as of the date of this article. Any of these intentions may alter in light of future development. For a further discussion of these and other factors that could cause future results to differ materially from any forward-looking statement, see the section titled "Risk Factors" in our periodic reports filed with the Hong Kong Stock Exchange and the other risks and uncertainties described in the Company's Annual Report for year-end December 31, 2021, and subsequent filings with the Hong Kong Stock Exchange.