Antengene Publishes Preclinical Research Paper on CD73 Small Molecule Inhibitor ATG-037 Combined with Selinexor in Cancer Gene Therapy

Shanghai and Hong Kong, PRC, September 14, 2026 — Antengene Corporation Limited（**"Antengene"**，SEHK: 6996.HK)，a leading innovative, commercial-stage global biotech company dedicated to discovering, developing and commercializing first-in-class and/or best-in-class medicines for autoimmune diseases, solid tumors and hematological malignancies indications, today announced that **a preclinical research paper evaluating the combination of ATG-037 (CD73 Small Molecule Inhibitor) and selinexor for the treatment of multiple myeloma (MM), conducted in collaboration with the Department of Hematology at Peking University Third Hospital, has been published in *Cancer Gene Therapy*, an international SCI journal under Springer Nature.**

Details of the Paper

Title: CD73 inhibitor enhances the antitumor activity of selinexor in multiple myeloma by restoring the activation of $CD8^+$ T cells

Journal: *Cancer Gene Therapy*

DOI: 10.1038/s41417-026-01078-9

Study Design：

The research team first analyzed CD73 expression across multiple tumor cell lines following selinexor treatment, then tested the combination *in vivo* using a J558-inoculated BALB/c mouse model, with mice divided into a vehicle group, an ATG-037 monotherapy group, a selinexor monotherapy group and a combination-

therapy group. Single-cell RNA sequencing was used to characterize immune cell subtypes and tumor-immune crosstalk, immunofluorescence staining was performed on tumor tissue, and a co-culture model of $CD8^+$ T cells and multiple myeloma cell lines was established to confirm the mechanism behind the combination's antitumor effect.

Key Findings:

Selinexor treatment was found to upregulate CD73 expression in the majority of tumors, a resistance-associated mechanism that the combination approach was designed to counter. In the mouse model, the combination therapy suppressed tumor growth with an inhibition rate of 62%, compared with 31% for ATG-037 monotherapy and 43% for selinexor monotherapy. Single-cell RNA sequencing showed that the combination synergistically potentiated $CD8^+$ T cell activation by enhancing the interaction between $CD8^+$ T cells and $Enpp1^+$ cells via the CD80-CD28 signaling pathway, and the resulting increase in $CD8^+$ T cell infiltration into tumor tissue was confirmed by immunofluorescence staining. In co-culture experiments, CD73 inhibition was shown to strengthen selinexor-mediated tumor cell killing by activating $CD8^+$ T cells, with significantly elevated levels of Granzyme B ($P=0.0252$) and IFN-γ ($P=0.0067$) observed in the combination group.

Conclusion：

The study highlights the synergistic potential of combining selinexor with a CD73 inhibitor for enhancing $CD8^+$ T cell-mediated tumor cytotoxicity in MM. Selinexor therapy upregulates CD73 in the TME, driving adenosine accumulation and an immunosuppressive state. Combined use of ATG-037 blocks this immunosuppressive feedback loop via suppression of CD73-dependent adenosine synthesis, restoring $CD8^+$ T cell activation and proliferation while enhancing T cell cytotoxicity through activation of the CD80-CD28 costimulatory

axis. These findings establish a novel, clinically feasible therapeutic paradigm for addressing drug resistance and refractory MM.

About Antengene

Antengene Corporation Limited (**"Antengene"**, SEHK: 6996.HK) is a global, R&D-driven, commercial-stage biotech company focused on developing first-in-class/best-in-class therapeutics for diseases with significant unmet medical needs. Its pipeline spans from preclinical to commercial stages, with key investigational candidates including ATG-022 (CLDN18.2 ADC), ATG-037 (oral CD73 inhibitor), ATG-101 (PD-L1 x 4-1BB bispecific antibody), ATG-125 (B7-H3 × PD-L1 bispecific ADC), ATG-207 (αCD3-TGF-β bifunctional fusion protein), as well as T cell engager (TCE) programs developed using Antengene's proprietary AnTenGager® platform.

AnTenGager®, is Antengene's proprietary TCE 2.0 platform, featuring "2+1" bivalent binding for low expressing targets, steric hindrance masking, and proprietary CD3 sequences with fast on/off kinetics to minimize cytokine release syndrome (CRS) and enhance efficacy. These characteristics support the platform's broad applicability across autoimmune diseases, solid tumors and hematological malignancies, with programs targeting CD19 x CD3 (ATG-201 for B cell-related autoimmune diseases; partnered with UCB), CDH6 x CD3 (ATG-106 for ovarian cancer and kidney cancer; partnered with K2 Therapeutics established by MPM BioImpact), ALPPL2 x CD3 (ATG-112 for gynecological tumors, digestive system malignancies, bladder cancer and NSCLC), LY6G6D x CD3 (ATG-110 for microsatellite-stable colorectal cancer), GPRC5D x CD3 (ATG-021 for multiple myeloma), LILRB4 x CD3 (ATG-102 for acute myeloid leukemia and chronic myelomonocytic leukemia) and FLT3 x CD3 (ATG-107 for acute myeloid leukemia).

To date, Antengene has obtained 34 investigational new drug (IND) approvals in the U.S. and Asia, and obtained new drug application (NDA) approvals in 10 Asia Pacific markets. Its lead commercial asset, XPOVIO® (selinexor), is approved in the Mainland of China, Taiwan China, Hong Kong China, Macau China, South Korea, Singapore, Malaysia, Thailand, Indonesia and Australia, and has been included in the national insurance schemes in five of these markets (Mainland of China, Taiwan China, Australia, South Korea and Singapore).

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, please see the other risks and uncertainties described in the Company's Annual Report for the year ended December 31, 2025, and the documents subsequently submitted to the Hong Kong Stock Exchange.