I-Mab Announces Multiple Advancements of 4-1BB Bispecific Antibody Portfolio

7月 1, 2021

- *First patient dosed in U.S. phase 1 clinical trial of TJ-CD4B/ABL111 in patients with advanced or metastatic solid tumors*
- *China sites to join the dose expansion part of the study to accelerate TJ-CD4B/ABL111 development*
- *Results of TJ-L14B/ABL503 preclinical studies accepted for publication in Journal for ImmunoTherapy of Cancer*

SHANGHAI and GAITHERSBURG, MD., July 1, 2021 /PRNewswire/ -- I-Mab (the "Company") (Nasdaq: IMAB), a clinical-stage biopharmaceutical company committed to the discovery, development, and commercialization of novel biologics, today announced multiple advancements in its 4-1BB bispecific antibody portfolio. Stimulation of 4-1BB is a promising therapeutic strategy for improving the current immunotherapy for cancers. I-Mab's lead bi-specific antibody assets TJ-CD4B/ABL111 and TJ-L14B/ABL503, both jointly developed with ABL Bio, Inc. (Kosdaq: 298380), are undergoing clinical development in the United States.

TJ-CD4B/ABL111 is the only clinical-stage bispecific antibody that binds to Claudin 18.2 (CLDN18.2)-expressing cancer cells and co-stimulatory molecule 4-1BB on immune cells to elicit a localized and combined immune response against solid tumors. Preclinical studies have demonstrated superior CLDN18.2-dependent immune activation with TJ-CD4B/ABL111 compared to 4-1BB monoclonal antibodies. The anti-tumor activity is achieved locally at the tumor site with no hepatotoxicity or systemic side effects that are commonly seen with 4-1BB monoclonal antibodies when used alone. Studies have also demonstrated a memory response that can resist tumor rechallenge for a long-lasting treatment effect.

A U.S. phase 1 clinical trial of TJ-CD4B/ABL111 in advanced or metastatic solid tumors (NCT04900818) has been initiated with the first patient being dosed on June 29, 2021. The phase 1 clinical study is a multi-center dose escalation and dose expansion study. To accelerate TJ-CD4B/ABL111 development, China sites will join the dose expansion part of the study. Patients with gastric cancer, esophageal adenocarcinoma and pancreatic cancer in China will be enrolled later this year.

TJ-L14B/ABL503 is another novel bispecific antibody uniquely designed to activate 4-1BB signalling in the presence of PD-L1, while simultaneously blocking PD-1/PD-L1 signalling. Preclinical studies have demonstrated superior anti-tumor activity for TJ-L14B/ABL503 compared to equimolar doses of 4-1BB and PD-L1 monoclonal antibodies single agents alone or in combination. The data suggest that TJ-L14B/ABL503 induced anti-tumor response was protective against tumor rechallenge in animal studies. These results have now been accepted for publication by the *Journal for ImmunoTherapy of Cancer* (JITC), titled "Novel anti-4-1BB X PD-L1 bispecific antibody augments anti-tumor immunity through tumor-directed T-cell activation and checkpoint blockade." A phase 1 clinical trial for TJ-L14B/ABL503 was initiated in the U.S. earlier in April 2021 in patients with locally advanced or metastatic solid tumors (NCT04762641).

"As the next-wave of innovation in immuno-oncology, bispecific antibodies could be a promising solution to cancers that are resistant to the existing standard of care," said Dr. Joan Shen, CEO of I-Mab. "With the rapid development of our bispecific antibody portfolio, we are excited to progress one of the world's first echelon of 4-1BB bispecific antibodies in the clinic."

About TJ-CD4B/ABL111

TJ-CD4B, also known as ABL111, is a Claudin 18.2 and 4-1BB bispecific antibody capable of binding to tumor cells expressing Claudin 18.2, i.e., gastric cancer and pancreatic cancer cells, and stimulating intra-tumoral T cells by the 4-1BB arm designed to be activated only upon tumor engagement whilst silent elsewhere. TJ-CD4B effectively maintains a strong tumor binding property and anti-tumor activity attributable to a synergistic effect of both Claudin 18.2 antibody and 4-1BB antibody while it avoids or minimizes liver toxicity and systemic immunotoxicity commonly seen with 4-1BB antibodies as a drug class. TJ-CD4B is being developed under collaboration between I-Mab and ABL.

About TJ-L14B/ABL503

Being developed jointly with ABL, TJ-L14B/ABL503 is a differentiated PD-L1-based bispecific antibody with the PD-L1 arm as the tumor-dependent T-cell activator and the 4-1BB arm as the conditional T cell activator upon tumor engagement. Using ABL's 'Grabody-T' bispecific antibody platform technology, TJ-L14B/ABL503 stimulates 4-1BB activation only in the presence of PD-L1 expressing tumor cells to minimize the risk of off-tumor toxicity. Preclinical studies have demonstrated that the bispecific antibody shows better anti-tumor activity than equimolar doses of single agents alone or in combination.

About I-Mab

I-Mab (Nasdaq: IMAB) is an innovation-driven global biotech company focusing on discovery, development and soon commercialization of novel and highly differentiated biologics in immuno-oncology therapeutic area. The Company's mission is to bring transformational medicines to patients around the world through drug innovation. I-Mab's globally competitive pipeline of more than 15 clinical and pre-clinical stage drug candidates is driven by its internal R&D capability and global licensing partnerships, based on the Company's unique Fast-to-Proof-of-Concept and Fast-to-Market pipeline

development strategies. The Company is now rapidly progressing from a clinical stage biotech company to a fully integrated global biopharmaceutical company with cutting-edge global R&D capabilities, a world-class GMP manufacturing facility and commercialization capability. I-Mab has established its global footprint in Shanghai (headquarters), Beijing, Hangzhou and Hong Kong in China, and Maryland and San Diego in the United States. For more information, please visit http://ir.i-mabbiopharma.com and follow I-Mab on LinkedIn, Twitter and WeChat.

I-Mab Forward Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other federal securities laws, including statements regarding data from the TJ-CD4B/TJ-L14B clinical trials, the potential implications of clinical data for patients, and the advancement by I-Mab and ABL, and anticipated clinical development, regulatory milestones and commercialization of TJ-CD4B/TJ-L14B. Actual results may differ materially from those indicated in the forward-looking statements as a result of various important factors, including but not limited to the ability of I-Mab and ABL to demonstrate the safety and efficacy of TJ-CD4B/TJ-L14B; the clinical results for the drug candidate, which may not support further development or NDA/BLA approval; the content and timing of decisions made by the relevant regulatory authorities regarding regulatory approval of the drug candidate; the ability to achieve commercial success for the drug candidate, if approved; I-Mab's ability to obtain and maintain protection of intellectual property for its technology and drugs; I-Mab's reliance on third parties to conduct drug development, manufacturing and other services; I-Mab's limited operating history and I-Mab's ability to obtain additional funding for operations and to complete the development and commercialization of its drug candidates; and the impact of the COVID-19 pandemic on the Company's clinical development, commercial and other operations, as well as those risks more fully discussed in the "Risk Factors" section in I-Mab's most recent annual report on Form 20-F, as well as discussions of potential risks, uncertainties, and other important factors in I-Mab's subsequent filings with the U.S. Securities and Exchange Commission. All forward-looking statements are based on information currently available to I-Mab, and I-Mab undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law.

For more information, please contact:

I-Mab
Jielun Zhu, Chief Financial Officer
E-mail: jielun.zhu@i-mabbiopharma.com
Office line: +86 21 6057 8000

Gigi Feng, Chief Communications Officer
E-mail: gigi.feng@i-mabbiopharma.com
Office line: +86 21 6057 5709

Investor Inquiries:
The Piacente Group, Inc.
Emilie Wu
E-mail: emilie@thepiacentegroup.com
Office line: + 86 21 6039 8363

View original content to download multimedia:https://www.prnewswire.com/news-releases/i-mab-announces-multiple-advancements-of-4-1bb-bispecific-antibody-portfolio-301323961.html

SOURCE I-Mab