ABL Bio Announces Publication of Preclinical Data Demonstrating Safety and Efficacy of ABL503/TJ-L14B, a Novel Anti-PD-L1 X 4-1BB Bispecific Antibody

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- ABL503/TJ-L14B demonstrates stronger anti-tumor efficacy than anti-PD-L1 or anti-4-1BB monotherapy as well as a good safety profile
- ABL503 currently in Phase 1 trial to evaluate the safety, tolerability, MTD PK and PD in patients with advanced or metastatic solid tumors

July 9, 2021 - ABL Bio, Inc. (KOSDAQ: 298380), a clinical-stage biotech developing bispecific antibody technology for immuno-oncology and neurodegenerative diseases, today announced the publication of pre-clinical data highlighting the safety and anti-tumor efficacy of ABL503/TJ-L14B in the Journal for ImmunoTherapy of Cancer(JITC).

Jointly developed with I-Mab (NASDAQ: IMAB), ABL503 is a bispecific antibody combining PD-L1 checkpoint pathway with 4-1BB agonistic activity to overcome the current limitation of PD-(L)1 therapy and 4-1BB related toxicity. Using ABL's Grabody-T bispecific antibody platform technology, ABL503 induces 4-1BB activation only in the presence of PD-L1 expressing tumors to minimize the risk of 4-1BB related peripheral toxicity. ABL503 is currently being evaluated in a Phase 1 study in the U.S. in patients with locally advanced or metastatic solid tumors (NCT04762641).

The paper, "Novel anti-4-1BB X PD-L1 bispecific antibody augments anti-tumor immunity through tumor-directed T-cell activation and checkpoint blockade," was published in collaboration with Su-Hyung Park, PhD, Professor at the KAIST Graduate School of Medical Science and Engineering. The paper highlights key in vitro and in vivo research that demonstrate ABL503's potential as a promising immunotherapeutic agent against cancer.

In the study, ABL503 induced complete tumor regression in humanized mice, which was superior to anti-PD-L1 or anti-4-1BB monotherapy. Moreover, no tumor growth was observed in these mice when they were rechallenged at 40 days after their first ABL503 treatment, demonstrating that ABL503 treatment yields a prolonged anti-tumor response despite a short-term administration schedule.

In addition, ABL503 was well-tolerated following a repeated high dose administration of ABL503 in monkeys. Monkeys treated with ABL503 exhibited overall good tolerance with normal liver functions.

"These published data validate our Grabody-T platform technology to achieve anti-tumor efficacy with a low risk of off-tumor liver toxicity and support the therapeutic value of ABL503 as a potential best-in-class treatment for cancer," said Sang Hoon Lee, Ph.D., CEO of ABL Bio. "We have great expectations for the program and look forward to further evaluating ABL503 in our Phase 1 study with I-Mab."

About ABL Bio

ABL Bio, Inc. (KOSDAQ: 298380) is a clinical-stage biotechnology company developing antibody therapeutics for immune-oncology and neurodegenerative diseases. With internal R&D and global partnerships, ABL has developed multiple BsAb platforms, such as 'Grabody-T,' 'Grabody-I' and 'Grabody-B' and built an innovative pipeline of multiple clinical and pre-clinical stage drug candidates. In the oncology area, we have developed Grabody-T, a modular 4-1BB engaging platform that has demonstrated superior efficacy and safety. In the neurodegenerative disorder space, we have developed Grabody-B, which is designed to maximize blood-brain barrier (BBB) penetration. Grabody-B is applicable to various CNS targets across a plethora of neurological disorders, potentially providing a breakthrough to address the high unmet medical needs in neurodegeneration. For more information, please visit www.ablbio.com

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