



MacroGenics Presented Preclinical Data about Margetuximab at the AACR Annual Meeting 2019

April 4, 2019

On April 03, 2019, MacroGenics, Inc. (NASDAQ: MGNX), a clinical-stage biopharmaceutical company focused on discovering and developing innovative monoclonal antibody-based therapeutics for the treatment of cancer, announced the presentation of preclinical and clinical data at the American Association for Cancer Research Annual Meeting 2019 (AACR) held in Atlanta, Georgia, which includes (but not limited to) a poster that showed margetuximab ADCC activity was superior than trastuzumab or pertuzumab in in vitro preclinical experiments.

Abstract #1538: Margetuximab Mediates Greater Fc-dependent Anti-tumor Activities than Trastuzumab or Pertuzumab In Vitro

Margetuximab is a novel, investigational anti-HER2 monoclonal antibody (mAb) with an Fc domain engineered to increase the molecule's ability to engage certain Fc-gamma receptors of cells of the innate immune system to enhance killing of tumor cells. SOPHIA, a Phase 3 clinical trial of margetuximab in HER2-positive metastatic breast cancer patients, met the primary endpoint of prolongation of progression-free survival (PFS) in patients treated with the combination of margetuximab plus chemotherapy compared to trastuzumab plus chemotherapy.

Preclinical data presented at AACR showed that margetuximab, while retaining the same Fc-independent tumor growth-inhibition activity as trastuzumab, exhibited more potent antibody-dependent cell-mediated cytotoxicity (ADCC) and induced greater activation and proliferation of NK cells in vitro compared to trastuzumab. In addition, the combination of margetuximab and pertuzumab mediated ADCC in vitro with greater potency than the combination of trastuzumab and pertuzumab.

"In margetuximab, we have designed an Fc-enhanced antibody that has been shown in a Phase 3 trial to have a superior PFS outcome to that of trastuzumab, an analog antibody with a wild-type Fc domain," said Scott Koenig, M.D., Ph.D., President and CEO of MacroGenics. "The in vitro data presented at AACR comparing margetuximab to trastuzumab help to further validate our Fc Optimization technology and the SOPHIA results from a mechanistic perspective."

About MacroGenics, Inc.

MacroGenics is a clinical-stage biopharmaceutical company focused on discovering and developing innovative monoclonal antibody-based therapeutics for the treatment of cancer. The Company generates its pipeline of product candidates primarily from its proprietary suite of next-generation antibody-based technology platforms, which have applicability across broad therapeutic domains. The combination of MacroGenics' technology platforms and protein engineering expertise has allowed the Company to generate promising product candidates and enter into several strategic collaborations with global pharmaceutical and biotechnology companies. For more information, please see the Company's website at www.macrogenics.com. MacroGenics, the MacroGenics logo, DART® and TRIDENT are trademarks or registered trademarks of MacroGenics, Inc.

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