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MacroGenics Presents Pre-Clinical Data on its Multivalent DR5 DART at the AACR Annual Meeting

ROCKVILLE, Md., April 20, 2015 (GLOBE NEWSWIRE) -- MacroGenics, Inc. (Nasdaq:MGNX), a clinical-stage biopharmaceutical company focused on discovering and developing innovative monoclonal antibody-based therapeutics for the treatment of cancer, as well as autoimmune disorders and infectious diseases, today announced the presentation of pre-clinical data for Dual-Affinity Re-Targeting (DART®) molecules that target DR5 at the 2015 American Association for Cancer Research (AACR) Annual Meeting in Philadelphia, PA. In addition, MacroGenics' collaboration partner, Pfizer Inc., presented pre-clinical data on a DART molecule that simultaneously targets P-cadherin and CD3.

MacroGenics presented a poster titled: "*DART® molecules with enhanced DR5 agonistic activity for improved cancer cell cytotoxicity."* In this poster, application of MacroGenics' DART platform is shown to drive clustering of DR5 on cancer cells resulting in potent anti-tumor activity, including activity in models of cancer stem cells.

DR5, or Death Receptor 5, member 10b of the tumor necrosis factor receptor superfamily, is a protein overexpressed in many kinds of tumors, including colorectal, lung, pancreatic, breast and prostate. Ligation of DR5 with its cognate ligand TRAIL or agonistic monoclonal antibodies elicits a pro-apoptotic signal on cancer cells, leading to programmed cell death. DR5 monoclonal antibodies selected from MacroGenics' discovery platform based on favorable normal/tumor binding properties were incorporated into multivalent DARTs. The efficacy of the DR5 DART molecules in mediating cancer cell cytotoxicity is 10-100 fold enhanced compared to that of TRAIL and previously described agonistic DR5-targeted monoclonal antibodies. Based on their enhanced potency and selectivity, DR5-targeting DARTs represent a new class of therapeutics that may overcome limitations of existing DR5-targeted therapeutics. The pre-clinical data support the use of DR5-engaging DARTs to exploit this apoptotic pathway in multiple cancer types.

"This pre-clinical data highlights the versatility of MacroGenics' DART technology," said Dr. Scott Koenig, M.D., Ph.D., President and Chief Executive Officer of MacroGenics. "Multivalent targeting further expands the range of potential therapeutic interventions that can be deployed through the Company's robust DART platform."

In addition, MacroGenics' collaboration partner, Pfizer, presented a poster titled "*Bispecific redirected T-cell immunotherapy targeting P-cadherin expressing tumors*." Pfizer will also present a second poster related to this molecule at the AACR 2015 Annual Meeting on Wednesday, April 22, 2015 from 8:00 am - 12:00 pm Eastern Time, titled "*Bio-distribution and tumor targeting of a P-cadherin x CD3 bi-specific redirected T-cell molecule using fluorescence molecular tomography imaging*."

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, as well as autoimmune disorders and infectious diseases. The company generates its pipeline of product candidates from its proprietary suite of next-generation antibody-based technology platforms. 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 is a registered trademark of MacroGenics, Inc.

Cautionary Note on Forward-Looking Statements

Any statements in this press release about future expectations, plans and prospects for the Company, including statements about the Company's strategy, future operations, clinical development of the Company's therapeutic candidates, milestone or opt-in payments from the Company's collaborators, the Company's anticipated milestones and future expectations and plans and prospects for the Company and other statements containing the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "predict," "project," "target," "potential," "will," "would," "could," "should," "continue," and similar expressions, constitute forward-looking statements within the meaning of The Private Securities Litigation Reform Act of 1995. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: the uncertainties inherent in the initiation and enrollment of future clinical trials, expectations of expanding ongoing clinical trials, availability and timing of data from ongoing clinical trials, expectations for regulatory approvals, other matters that could

affect the availability or commercial potential of the Company's product candidates and other risk factors described in the Company's filings with the Securities and Exchange Commission. In addition, the forward-looking statements included in this press release represent the Company's views as of the date hereof. The Company anticipates that subsequent events and developments will cause the Company's views to change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date hereof.

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