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MacroGenics Presents Pre-Clinical Data on Inhibition of Autoimmune Diseases With DART Candidate MGD010 at IMMUNOLOGY 2014

ROCKVILLE, Md., May 5, 2014 (GLOBE NEWSWIRE) -- MacroGenics, Inc. (Nasdaq:MGNX), a clinical-stage biopharmaceutical company focused on discovering and identifying innovative monoclonal antibody-based therapeutics for the treatment of cancer and autoimmune diseases, today announced the presentation of pre-clinical data on MGD010, a bi-specific Dual-Affinity Re-targeting (DART®) protein, demonstrating its ability to inhibit B-cell activation without B-cell depletion, which could provide a novel treatment option for patients with autoimmune disorders. MGD010 also was shown to inhibit the development of graft-versus-host disease in a humanized murine model, a system amenable to ascertain the activity of immunomodulatory intervention. These data were presented at IMMUNOLOGY 2014, the American Association of Immunologists' Annual Meeting, in Pittsburgh, PA.

MGD010 is designed to interact with B cells in a specific manner by simultaneously targeting CD32B, a key negative regulator of autoimmune response, and CD79B, a B-cell receptor component. MacroGenics believes that MGD010 preferentially blocks activated B cells that promote the autoimmune response.

"Although B cells are known to play a critical role in autoimmune disorders, targeted B-cell treatments have thus far been limited due to a delayed onset of action or an indiscriminate depletion of B cells leading to increased risk of infection," said Scott Koenig, M.D., Ph.D., President and CEO of MacroGenics. "Here, we demonstrate in pre-clinical models that MGD010 offers a new mechanism of action through its dual-targeting capabilities, resulting in the inhibition of B-cell activation without depleting B cells. Thus, MGD010 represents a promising new potential therapy for autoimmune disorders."

In the study presented, "Development of human B-lymphocyte targeted bi-specific DART® molecules for the treatment of autoimmune disorders," the key findings below were observed.

- Repeat administration of MGD010 inhibited both humoral immune responses and the development of graft-versus-host disease in a humanized murine model.
- MGD010 inhibited B-cell activation ex vivo in samples from patients with autoimmune disorders.
- MGD010 demonstrated a favorable safety profile, including no cytokine release or B-cell depletion in a non-human primate model.
- MGD010 had prolonged pharmacokinetics, which should support convenient dosing.

Background on DART Platform

MacroGenics' Dual-Affinity Re-Targeting (DART®) platform enables the targeting of multiple antigens or cells by using a single molecule with an antibody-like structure. The Company has created over 100 DART-based molecules, or DARTs, that have been configured for the potential treatment of cancer, autoimmune disorders, and infectious diseases. These DARTs can be tailored for either short or prolonged pharmacokinetics and have demonstrated good stability and attractive manufacturability. The Company has completed in vitro and in vivoproof-of-concept pre-clinical studies with multiple candidates and expects to advance its first two DARTs into clinical development in 2014.

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 and autoimmune diseases. The company generates its pipeline of product candidates from its proprietary suite of next-generation antibody technology platforms, which it believes improve the performance of monoclonal antibodies and antibody-derived molecules. The company creates both differentiated molecules that are directed to novel cancer targets, as well as "bio-betters," which are drugs designed to improve upon marketed medicines. The combination of MacroGenics' technology platforms and antibody engineering expertise has allowed the company to generate promising product candidates and enter into several strategic collaborations with global pharmaceutical and biotechnology companies.

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.

CONTACT: Jim Karrels, Vice President, CFO

MacroGenics, Inc.

1-301-251-5172, info@macrogenics.com

Karen Sharma, Vice President

MacDougall Biomedical Communications

1-781-235-3060, ksharma@macbiocom.com

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