January 27, 2015

MacroGenics Announces Closing of Collaboration and License Agreement with Janssen to Develop MGD011 for Multiple B-Cell Malignancies

MacroGenics, Inc. (NASDAQ: MGNX), a clinical-stage biopharmaceutical company focused on discovering and developing innovative monoclonal antibody-based therapeutics for the treatment of cancer and autoimmune diseases, today announced the closing of the global collaboration and license agreement for MGD011 with Janssen Biotech, Inc. The agreement was announced on December 22, 2014.

Under the terms of the agreement, MacroGenics will receive a $50 million upfront license fee and Johnson & Johnson Innovation - JJDC, Inc. has invested $75 million with the purchase of 1,923,077 new shares of MacroGenics common stock at a price of $39.00 per share. Janssen will be fully responsible for developing MGD011 following submission of the IND, which is planned for 2015. Assuming successful development and commercialization, MacroGenics could receive up to an additional $575 million in clinical, regulatory and commercialization milestone payments. MacroGenics may elect to fund a portion of late-stage clinical development in exchange for a profit share in the U.S. and Canada. If commercialized, MacroGenics would be eligible to receive double-digit royalties on any global net sales and has the option to co-promote the molecule with Janssen in the U.S.

About MGD011

MGD011, a humanized CD19 x CD3 bispecific DART protein, is being developed for the treatment of B-cell hematological malignancies. CD19, a lymphocyte-specific marker expressed from early B-lymphocyte development through mature memory B cells, is highly represented in B-cell malignancies. This makes it attractive for targeted interventions. MGD011 is designed to redirect T cells, via their CD3 component, to eliminate CD19-expressing cells found in many hematological malignancies. MGD011 has been engineered to address half-life challenges posed by other programs targeting CD19 and CD3. This product candidate has an Fc domain, which allows for extended pharmacokinetic properties and convenient dosing at a once-a-week or longer interval. In addition, MGD011 and the Company's other DART molecules that redirect T cells against cancer targets are manufactured using a conventional antibody platform without the complexity of having to genetically modify T cells from individual patients as required by approaches such as chimeric antigen receptor (CAR) T-cells.

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 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.

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CONTACT: Jim Karrels, Senior 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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