



Monarch Biosciences Announces Exclusive License with Fred Hutch and Presentations at BIO Regarding Cell Therapy Delivery Technology

- Company to give two presentations at BIO International Convention in Boston June 4th – 7th, 2018: (i) Start-Up Stadium Finalist Presentation - Tuesday, June 5th from 3:15 – 3:30, Boston Convention Center, North Lobby; (ii) Company Presentation - Wednesday, June 6th from 2:15 – 2:30, Boston Convention Center, Theater 1

- Presentations to focus on dramatic increase in efficacy of locally-delivered cell therapies targeting solid tumors in preclinical models

LOS ANGELES, May 22, 2018 /PRNewswire/ -- Monarch Biosciences, Inc. (MonarchBio) today announced that (i) it has entered into an exclusive worldwide license agreement with Fred Hutchinson Cancer Research Center (Fred Hutch) for technology related to local delivery of cell therapies treating solid tumors and (ii) was selected as a finalist in the BIO Start-Up Stadium competition and will be giving two presentations at the BIO International Convention in Boston from June 4th – 7th where it will detail pre-clinical results from its collaboration with Fred Hutch on local delivery of cell therapies for treating solid tumors.

The Fred Hutch license leverages MonarchBio's thin-film biomaterial platform to create the company's lead product, the Engineered Lymph Node (ELN). The ELN provides a scaffold for delivering ultra-high densities of anti-cancer lymphocytes, including CAR-T, TCR and NK cells, directly to the tumor. Once in place, the ELN provides an immunostimulatory microenvironment that fosters rapid expansion of the anti-cancer lymphocytes and a robust anti-tumor effect in multiple preclinical models. Recent work at Fred Hutch in a mouse model of metastatic ovarian cancer using ROR1-directed CAR-T cells delivered on the ELN showed a long-term survival of 70% as compared to 100% mortality after 65 days in mice receiving intravenous or intratumoral injections of the CAR-T cells ($p < 0.001$).

"Clinical results from cell therapies targeting solid tumors to-date have failed to demonstrate the high level of efficacy observed in hematologic malignancies," said Colin Kealey, M.D., MonarchBio's Chief Medical Officer. "We believe that MonarchBio's ELN provides a credible path to overcome this challenge. Our ELN is a versatile platform for delivering ultra-high cell densities directly to the tumor. Once in-place, the ELN's immune stimulating microenvironment fosters rapid clonal expansion and killing of tumor by the engineered cells," added Kealey.

The ELN combines MonarchBio's thin-film cell scaffold with a proprietary combination of immune stimulating adjuvants. The ELN was developed in collaboration with Fred Hutch in the laboratory of Matthias Stephan, M.D., Ph.D., Associate Member Fred Hutchinson Cancer Research Center,

and Associate Professor, Department of Medicine, Division of Oncology at the University of Washington Medical School.

About Monarch Biosciences, Inc.

MonarchBio is a Los Angeles-based biotechnology company focused on local delivery of cell therapies for treating solid tumors. MonarchBio's unique thin-film biomaterial platform allows for delivery of ultra-high cell densities directly to the tumor. The MonarchBio cell delivery system can also be incorporated into a variety of implants, such as stents and other minimally-invasive devices, giving cell therapies direct access to a wide range of anatomies. For more information, please visit www.monarch-bio.com.

CAUTION: MonarchBio's Engineered Lymph Node is limited by Federal (or United States) law to investigational use only.

Forward-Looking Safe Harbor Statement

This press release contains forward-looking statements, including but not limited to, research and development outcomes, efficacy, adverse reactions, market and product potential, product availability and other statements regarding our technology. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or unknown risks or uncertainties materialize, actual results could vary materially from the Company's expectations and projections. Risks and uncertainties include, among other things, general industry and medical device market conditions; technological advances and patents attained by competitors; challenges inherent in the research and development and regulatory processes; challenges related to new product marketing, such as the unpredictability of market acceptance for new medical device products; inconsistency of treatment results among patients; potential difficulties in manufacturing a new product; general economic conditions; and governmental laws and regulations affecting domestic and foreign operations.

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