Zymeworks Presents Preclinical Data at the Annual Meeting of the American Association for Cancer Research

April 17, 2018

Highlights ZW49, its HER2-Targeted Bispecific Antibody Drug Conjugate and Novel ZymeLink™ Platform

VANCOUVER, British Columbia--(BUSINESS WIRE)-- Zymeworks Inc. (NYSE/TSX: ZYME), a clinical-stage biopharmaceutical company developing multifunctional therapeutics, today presented preclinical data on ZW49, its lead bispecific antibody-drug conjugate candidate (ADC) and its ZymeLink ADC platform. As previously reported, Zymeworks expects to file an Investigational New Drug (IND) application this year in order to begin clinical trials with ZW49 for patients with HER2-expressing cancers.

Abstract Number: 3914; ZW49, A HER2 Targeted Biparatopic Antibody Drug Conjugate for the Treatment of HER2 Expressing Cancers

Summary: ZW49, which incorporates Zymeworks' Azymetric™ bispecific and ZymeLink™ ADC technology platforms, was shown to be active and well tolerated in a series of preclinical studies. The unique biparatopic (ability to simultaneously bind two distinct locations on a single target) properties of ZW49 enable highly efficient delivery of its cancer cell killing payload while its ZymeLink-enhanced tolerability allows higher doses to be administered leading to improved anti-tumor activity. In models of both high and low HER2-expressing cancers, administration of ZW49 resulted in complete regression of the tumors. Importantly, ZW49 was well tolerated in preclinical safety studies at the same exposure levels that demonstrated efficacy in tumor models, without the toxicities generally associated with this class of ADC payloads.

Abstract Number: 3912; Towards Development of Next Generation Biparatopic ADCs Using a Novel Linker-Toxin with Expanded Therapeutic Window

Summary: Many ADCs in development ultimately fail to demonstrate efficacy in clinical testing due to dose-limiting toxicities. Zymeworks' approach to ADC development is focused on efficient payload delivery and improving tolerability to enable greater exposures at the tumor rather than the conventional approach of solely increasing ADC potency. Preclinical data demonstrate that ZymeLink improved the tolerability of ADCs against four known clinical targets compared to the corresponding ADC platforms used in clinical trials. This enabled ZymeLink ADC exposures of at least seven-fold higher than benchmark ADCs which translated to increased anti-tumor activity in preclinical models. Ongoing efforts are focused on evaluating biparatopic versions of these ZymeLink ADC candidates to expand the therapeutic window even further.

"Combining our complementary Azymetric and ZymeLink technology platforms gives us a foundation to create active and well tolerated ADCs," said Ali Tehrani, Ph.D., Zymeworks' President & CEO. "ZW49 is the first of many of ADCs that we plan to develop as part of our diverse pipeline of new medicines to overcome the limitations of current therapies and ultimately, defeat cancer."

About ZW49

ZW49 is a biparatopic (a bispecific antibody that can simultaneously bind two non-overlapping epitopes on a single target) anti-HER2 ADC based on the same antibody framework as ZW25, Zymeworks' lead clinical candidate being evaluated in a Phase 1 study, but armed with the company's proprietary ZymeLink cytotoxic (potent cancer-cell killing) payload. ZW49 may mediate its therapeutic effect through a combination of mechanisms, including: increased HER2 receptor-antibody clustering and internalization leading to toxin-mediated cytotoxicity; increased binding and removal of HER2 protein from the cell surface; and potent effector function.

About Antibody-Drug Conjugates

Antibody-drug conjugates (ADC) are a class of anti-cancer therapies intended to precisely target tumor cells in order to avoid the significant toxicities routinely associated with cancer treatments while simultaneously improving their efficacy. An ADC is an antibody that is connected, or conjugated, to a small molecule drug. It has three critical components: the antibody for targeting of specific cells, the cytotoxin (or payload) being delivered to induce cancer cell death, and the linker, which connects the two components together.

About the ZymeLink™ Platform

The ZymeLink platform is a modular suite of site-specific conjugation technologies, customizable linkers, and proprietary cytotoxic payloads designed for the targeted delivery of therapeutics with optimal tolerability and efficacy. The ZymeLink platform is compatible with traditional antibodies and with the Azymetric platform and is intended to facilitate the development of next-generation therapeutics.

About the Azymetric™ Platform

The Azymetric platform enables the transformation of monospecific antibodies into bispecific antibodies, giving them the ability to simultaneously bind

two different targets. Azymetric™ bispecific technology enables the development of multifunctional biotherapeutics that can block multiple signaling pathways, recruit immune cells to tumors, enhance receptor clustering degradation, and increase tumor-specific targeting. These features are intended to enhance efficacy while reducing toxicities and the potential for drug-resistance. Azymetric bispecifics have been engineered to retain the desirable drug-like qualities of naturally occurring antibodies, including low immunogenicity, long half-life and high stability. In addition, they are compatible with standard manufacturing processes with high yields and purity, potentially significantly reducing drug development costs and timelines.

About Zymeworks Inc.

Zymeworks is a clinical-stage biopharmaceutical company dedicated to the discovery, development and commercialization of next-generation multifunctional biotherapeutics. Zymeworks' suite of complementary therapeutic platforms and its fully integrated drug development engine provide the flexibility and compatibility to precisely engineer and develop highly differentiated product candidates. Zymeworks' lead product candidate, ZW25, is a novel bispecific antibody currently being evaluated in an adaptive Phase 1 clinical trial. Zymeworks is also advancing a deep pipeline of preclinical product candidates and discovery-stage programs in immuno-oncology and other therapeutic areas. In addition to Zymeworks' wholly owned pipeline, its therapeutic platforms have been further leveraged through multiple strategic partnerships with global biopharmaceutical companies.

Cautionary Note Regarding Forward-Looking Statements

This press release includes "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of Canadian securities laws, or collectively, forward-looking statements. Forward-looking statements in this news release include, but are not limited to, statements that relate to Zymeworks' anticipated filing of an IND application, anticipated commencement of ZW49 clinical trials and anticipated clinical results, future development of ADC candidates, the expectation that the ZymeLink platform will facilitate the development of next-generation therapeutics, the potential for the Azymetric platform to reduce drug development costs and timelines, future development of preclinical product candidates and discovery-stage programs in immuno-oncology and other therapeutic areas, and other information that is not historical information. When used herein, words such as "anticipate", "plan", "expect", "will", "may", "continue", and similar expressions are intended to identify forward-looking statements. In addition, any statements or information that refer to expectations, beliefs, plans, projections, objectives, performance or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking. All forward-looking statements are based upon Zymeworks' current expectations and various assumptions. Zymeworks believes there is a reasonable basis for its expectations and beliefs, but they are inherently uncertain. Zymeworks may not realize its expectations, and its beliefs may not prove correct. Actual results could differ materially from those described or implied by such forward-looking statements as a result of various factors, including, without limitation, market conditions and the factors described under "Risk Factors" in Zymeworks' Annual Report on Form 10-K for its fiscal year ended December 31, 2017 (a copy of which may be obtained at www.sec.gov and www.sedar.com). Consequently, forward-looking statements should be regarded solely as Zymeworks' current plans, estimates and beliefs. Investors should not place undue reliance on forward-looking statements. Zymeworks cannot guarantee future results, events, levels of activity, performance or achievements. Zymeworks does not undertake and specifically declines any obligation to update, republish, or revise any forward-looking statements to reflect new information, future events or circumstances or to reflect the occurrences of unanticipated events, except as may be required by law.

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