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NEWS RELEASE

HELIX BIOPHARMA CORP. PRESENTS TOPLINE L-DOS47 RESULTS AT THE 17th IASCLC WORLD CONFERENCE ON LUNG CANCER

Phase I/II dose escalation study of immunoconjugate L-DOS47 as a monotherapy in non-squamous non-small cell lung cancer patients

(Toronto, Ontario) - Helix BioPharma Corp. (TSX: HBP) (FRANKFURT: HBP), a clinical stage immuno-oncology company developing innovative drug candidates for the prevention and treatment of cancer, announce that it presented topline data from its phase I/II dose escalation study of immunoconjugate L-DOS47 as a monotherapy in non-squamous non-small cell lung cancer patients at the 17th IASCLC World Conference on Lung Cancer ("WCLC") held in Vienna, Austria.

This is a Phase I/II, open-label, non-randomised study designed to evaluate the safety and tolerability of ascending doses of study drug ("L-DOS47") in male and female patients aged ≥ 18 years old with Stage IIIb or IV non-squamous non-small cell lung cancer ("NSCLC"). The staging of NSCLC was conducted according to Tumour Node Metastases ("TNM"), 7th Edition. Patients were recruited into cohorts, with a minimum of three and a maximum of six patients per cohort. Primary study objectives included to determine the maximum tolerated doses of multiple rising doses of L-DOS47 and to make a preliminary assessment of the efficacy of L-DOS47.

A total of ninety (90) patients were consented and screened for participation in the study. Fifty-five (55) patients were administered at least one dose of L-DOS47 at dose levels ranging from 0.12 to 13.55µg/kg. Twenty-one (21) patients completed four treatment cycles and sixteen (16) patients were administered additional L-DOS47 cycles. Forty-eight (48) or 85% of patients were Stage IV as assessed according to TNM, 7th edition and based on computed tomography (CT) scan. None of the patients had prior history of other malignancies or had a known history of central nervous system metastatic disease. Of the 390 doses administered to patients in the Phase I study, 96% were administered without a dose delay or dose interruption. Comparatively, patients in cohorts 13 to 16 (5.76 to 13.55µg/kg) were exposed to more L-DOS47 for a longer duration without a significant change to the safety profile of L-DOS47 compared to the other dosing cohorts.

Forty-four (44), or 80% of the patients in the safety population had at least one treatment emergent adverse events. The only dose limiting toxicity reported was a grade 4 bone pain resulting in the permanent discontinuation of L-DOS47. L-DOS47 did not elicit a dose-dependent release of cytokines at doses up to 13.55µg/kg. The MTD of L-DOS47 was not reached in the Phase I component of study LDOS002 at doses administered up to 13.55µg/kg. L-DOS47 was well tolerated at all dose levels up to 13.55µg/kg.

Forty-seven (47) of the 55 patient dosed in the Phase I component of the study contributed to the response evaluable population. A dose response trend was observed when comparing the percentage of patients who were progression free at 16 weeks across dose ranges. A similar trend was observed when comparing

the percentage of patient who had an overall tumour response of Stable Disease (as defined in RECIST v1.1) and had a reduction in the sum of target lesions.

Eleven (11) of 14 or 79% of patients in the highest dosing cohorts (5.76 to 13.55µg/kg) had an overall tumour response of Stable Disease following the administration of two cycles of L-DOS47. Seven (7) of 14 or 50% of patients in the same dosing cohorts had an overall tumour response of Stable Disease and a reduction in the sum of target lesions and 57% of patients were progression free for greater than 16 weeks.

“We are very encouraged by both the safety and efficacy data from the study”, said Dr. Sven Rohmann, Helix’s Chief Executive Officer. “This is a major milestone for the company and for our immuno-oncology program”.

Following the review of clinical data collected to-date, L-DOS47 has achieved many of the goals of early phase study; namely to determine the initial safety profile of the product and to acquire enough data to defend a proposed dose with which to subsequently test in various cancer indications. These data also suggest that L-DOS47 may be effective in treatment of CEACAM6 expressing tumors and may be more efficacious in combination with other therapies that may benefit from the pH-modulating effects of L-DOS47.

About L-DOS47

L-DOS47 is Helix's first immunoconjugate-based drug candidate in development is based on Helix's novel DOS47 technology platform which the Company believes alters the tumor microenvironment from acidic to alkaline and is positioning its core technology in the field of immuno-oncology as a unique Tumour Defence Breaker™. The Company believes L-DOS47 represents an innovative approach in modifying the microenvironmental conditions of cancer cells which the Company also believes serves as a general defense against cancer drugs and immunotherapies. Breaking the tumor defense by changing the tumor micro environment from acidic to alkaline represents one of the forgotten hallmarks of cancer. L-DOS47 is intended to offer an innovative approach to the first-line treatment of inoperable, locally advanced, recurrent or metastatic non-small cell lung cancer. L-DOS47 is currently being evaluated in two clinical studies, one in the United States (“LDOS001”) and the other in Poland (“LDOS002”).

About LDOS001

LDOS001 is a Phase I, open label, dose escalation study being conducted in the United States at three centers; The University of Texas, M.D. Anderson Cancer Centre, Penn State Milton S. Hershey Medical Center; and University Hospitals Case Medical Center. The primary objective of the study is to determine the safety and tolerability of L-DOS47 in combination treatment with pemetrexed/carboplatin. The study will also evaluate the potential clinical benefit of L-DOS47 with this combination. Other exploratory objectives include the evaluation of the L-DOS47 pharmacokinetics and immunogenicity.

About LDOS002

LDOS002 is an open-label Phase I/II clinical study being conducted in Poland to evaluate the safety, tolerability and preliminary efficacy of ascending doses of L-DOS47, initially as a monotherapy, in patients with inoperable, locally advanced, recurrent or metastatic, non-squamous, stage IIIb/IV NSCLC. The study is being conducted at five Polish centers under the direction of Dr. Dariusz Kowalski at The Maria Sklodowska-Curie Memorial Cancer Centre & Institute of Oncology as the overall coordinating investigator, together with four other principal investigators: Prof. Cezary Szczylik, MD, PhD at the Military Medical Institute, Prof. Elzbieta Wiatr, MD, PhD at the National Tuberculosis and Lung Diseases Research Institute, Dr. Aleksandra Szczensa, MD, PhD at the Mazovian Center of Pulmonary Diseases and Tuberculosis in Otwock and Prof. Rodryg Ramlau, MD, PhD at the Department of Oncology, Poznan University of Medical Science.

About Helix BioPharma Corp.

Helix BioPharma Corp. is an immuno-oncology company specializing in the field of cancer therapy. The company is actively developing innovative products for the prevention and treatment of cancer based on its proprietary technologies. Helix's product development initiatives include its novel L-DOS47 new drug candidate. Helix is currently listed on the TSX and FSE under the symbol "HBP".

Investor Relations

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Forward-Looking Statements and Risks and Uncertainties

This news release contains certain forward-looking statements and information (collectively, "forward-looking statements") within the meaning of applicable Canadian securities laws, without limitation, those relating to unique Tumour Defense Breaker™, which may be identified by words including, without limitation, "unique", "believes" "will", "may", "modifying", "anticipated", "intended", "build". "effective", "continuing progress" and other similar expressions, are intended to provide information about management's current plans and expectations.

Forward-looking statements include, without limitation, statements concerning (i) the Company's ability to operate on a going concern being dependent mainly on obtaining additional financing; (ii) the Company's priority continuing to be L-DOS47; (iii) the Company's development programs for DOS47 and L-DOS47; (iv) future expenditures, the insufficiency of the Company's current cash resources and the need for financing; and (v) future financing requirements and the seeking of additional funding. Forward-looking statements can further be identified by the use of forward-looking terminology such as "ongoing", "estimates", "expects", or the negative thereof or any other variations thereon or comparable terminology referring to future events or results, or that events or conditions "will", "may", "could", or "should" occur or be achieved, or comparable terminology referring to future events or results.

Forward-looking statements are statements about the future and are inherently uncertain, and are necessarily based upon a number of estimates and assumptions that are also uncertain. Although the Company believes that the expectations reflected in such forward-looking statements are reasonable, such statements involve risks and uncertainties, and undue reliance should not be placed on such statements. Forward-looking statements, including financial outlooks, are intended to provide information about management's current plans and expectations regarding future operations, including without limitation, future financing requirements, and may not be appropriate for other purposes. Certain material factors, estimates or assumptions have been applied in making forward-looking statements in this news release, including, but not limited to, the safety and efficacy of L-DOS47; that sufficient financing will be obtained in a timely manner to allow the Company to continue operations and implement its clinical trials in the manner and on the timelines anticipated; the timely provision of services and supplies or other performance of contracts by third parties; future costs; the absence of any material changes in business strategy or plans; and the timely receipt of required regulatory approvals and strategic partner support.

The Company's actual results could differ materially from those anticipated in the forward-looking statements contained in this news release as a result of numerous known and unknown risks and uncertainties, including without limitation, the risk that the Company's assumptions may prove to be incorrect; the risk that additional financing may not be obtainable in a timely manner, or at all, and that clinical trials may not commence or complete within anticipated timelines or the anticipated budget or may fail; third party suppliers of necessary services or of drug product and other materials may fail to perform or be unwilling or unable to supply the Company, which could cause delay or cancellation of the Company's research and development activities; necessary regulatory approvals may not be granted or may be withdrawn; the Company may not be able to secure necessary strategic partner support; general economic conditions, intellectual property and insurance risks; changes in business strategy or plans; and other risks and uncertainties referred to elsewhere in this news release, any of which could cause actual results to vary materially from current results or the Company's anticipated future results. Certain of these risks and uncertainties, and others affecting the Company, are more fully described in Helix's Annual Information Form, in particular under the headings "Forward-looking Statements" and "Risk Factors", and other reports filed under the Company's profile on SEDAR at www.sedar.com from time to time. Forward-looking statements and information are based on the beliefs, assumptions, opinions and expectations of Helix's management on the date of this new release, and the Company does not assume any obligation to update any forward-looking statement or information should those beliefs, assumptions, opinions or expectations, or other circumstances change, except as required by law.