Kodiak Sciences Announces Top-Line Results from its initial Phase 2b/3 Study of KSI-301 in Patients with Neovascular (Wet) Age-Related Macular Degeneration

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- The study did not meet the primary endpoint of showing non-inferior visual acuity gains compared to aflibercept given every eight weeks

- Nearly 60% of KSI-301 patients achieved every 5-month dosing at year 1 with visual acuity gains and anatomic improvements comparable to the overall aflibercept group

- KSI-301 was safe and well tolerated, with no new or unexpected safety signals

- Conference call scheduled today at 8:00 a.m. ET

PALO ALTO, Calif., Feb. 23, 2022 /PRNewswire/ -- Kodiak Sciences Inc. (Nasdaq: KOD) today announced top-line results from its randomized, double-masked, active comparator-controlled Phase 2b/3 clinical trial evaluating the efficacy, durability and safety of KSI-301, a novel antibody biopolymer conjugate, in treatment-naïve subjects with neovascular (wet) age-related macular degeneration.

The trial randomized 559 participants, approximately 80% of whom were enrolled in the United States. The study had two treatment arms: KSI-301 5mg on a flexible long-interval regimen and aflibercept 2mg on a fixed short-interval regimen. In the study, three monthly loading doses were administered to all subjects at 0-, 4- and 8-weeks. Subjects on aflibercept were then treated at fixed 2-month intervals. Subjects on KSI-301 were assessed starting 3 months after the completion of the loading phase (*i.e.* beginning at 20 weeks) and, based on predefined disease activity criteria, were treated every 3-, 4-, or 5-months. As a result, patients in the KSI-301 group did not receive dosing more frequently than every 3 months at any point in the study after the loading phase. The primary endpoint of the study was the average change in best-corrected visual acuity (BCVA) score (a measure of the best vision a person can achieve when reading letters on an eye chart, including with correction such as glasses) from baseline at year 1. For the assessment of the primary efficacy endpoint, KSI-301 patients in all three groups (dosed every 3, 4 or 5 months) were pooled together and their BCVA was compared as a group to the aflibercept group (dosed every 2 months).

The results show that, although KSI-301 demonstrated strong durability and was safe and well tolerated, it did not meet the primary efficacy endpoint of showing non-inferior visual acuity gains for subjects dosed on extended regimens compared to aflibercept given every eight weeks.

A pre-specified secondary analysis at year 1 assessing durability showed 59% of patients in the KSI-301 arm achieved five-month dosing with visual acuity gains and anatomic improvements comparable to the overall aflibercept group.

KSI-301 was safe and well tolerated in the study, with no new safety signals identified.

"Allowing treatment with KSI-301 no more often than every 12 weeks after the loading phase for every patient turned out to be insufficient," said Victor Perlroth, MD, Kodiak's Chief Executive Officer. "Nonetheless, we believe the results demonstrate a clear anti-VEGF effect, strong durability and a reassuring safety profile. We think that these data continue to support the potential of our ABC Platform to significantly extend treatment intervals in retinal disorders in a safe and convenient manner. Looking forward, our BEACON study in retinal vein occlusion will have the primary endpoint visit completed in all patients this coming June with top-line data anticipated to follow shortly thereafter. For our GLEAM and GLIMMER long-interval studies in diabetic macular edema as well as the DAYLIGHT short-interval study in wet AMD, we expect top-line data in early 2023. As our understanding of KSI-301 and the different patient populations within retinal vascular diseases evolved, our study designs have also evolved. One significant factor that likely contributed to this Phase 2b/3 study missing its primary endpoint – undertreatment of a minority of patients – is addressed in BEACON (proactive dosing every 8 weeks) and GLEAM and GLIMMER (tighter dynamic retreatment criteria and dosing as frequently as every 8-weeks) and is not present in DAYLIGHT in which all patients are proactively treated on an every 4-week regimen."

"We learned that the study design stretched it too far for the roughly 30% of patients who could have benefited from more VEGF inhibition than the minimal every 3 months in the study," said Dr. Carl Regillo, MD, Chief of the Retina Service at Wills Eye Hospital in Philadelphia and a study investigator. "These patients' visual acuity deteriorated, and consequently the KSI-301 treated patients overall did not achieve non-inferior visual acuity outcomes compared to the aflibercept treated patients. But the clear and unprecedented durability of effect for the majority of KSI-301 patients treated with an intravitreal medicine is expected to be a significant advance for the wet AMD patient community. KSI-301 at year 1 brought more than half the patients on an every 5-month regimen to the 20/40 vision required to drive a motor vehicle. Kodiak's ongoing Phase 3 program is intended to further clarify the important role KSI-301 can play in the treatment of retinal vascular disorders. Retinal vein occlusion and diabetic macular edema are very different diseases from wet AMD, and Kodiak's BEACON, GLEAM and GLIMMER study designs importantly already provide more frequent treatment for high-need patients. The DAYLIGHT study with its proactive monthly dosing is expected to answer the question as to the effectiveness of early and intensive treatment in wet AMD with KSI-301."

"Building on the observations and retreatment criteria used in our earlier Phase 1b study, the study's dosing interval selection criteria achieved the important goal of identifying patients who could do well with every 5-month dosing of KSI-301," said Jason Ehrlich, MD, PhD, Chief Medical Officer and Chief Development Officer of Kodiak. "This group represented a majority of patients receiving KSI-301. At the same time, it appears from the data that the KSI-301 patients with persistent or early recurrent disease activity may have benefited from treatment more frequently than what the study parameters allowed. At the time we designed this study, it was thought that extending all wet AMD patients to every 3-month or longer dosing was important, and we designed our study in part with this goal in mind. The ongoing DAYLIGHT study should clearly address the question of whether intensive dosing with KSI-301 provides sufficient VEGF inhibition for this important minority of patients living with wet AMD."

"On the safety front, intraocular inflammation occurred in a low single-digit percent of KSI-301 patients (3.2%), as compared to 0.0% of patients treated with aflibercept. Recent wet AMD studies have reported intraocular inflammation rates with aflibercept of 1–4.5%. In all cases reported in our study, the clinical finding of inflammation resolved, and no cases of intraocular inflammation with vascular occlusions were observed. We believe that these safety data coupled with the safety observations across the ongoing Phase 3 studies continue to suggest a safety profile for KSI-301 comparable to aflibercept", said Dr. Ehrlich.

Dr. Ehrlich continued, "We thank the participants, clinicians, site staff and the Kodiak team who participated in this trial and who continue to participate in the ongoing and important KSI-301 clinical program."

Full results from the study are expected to be presented at a future medical symposium.

Conference Call and Webcast

Kodiak will host a conference call and webcast to discuss the results of the Phase 2b/3 study today, February 23 at 8:00 a.m. ET. To access the live call by phone, please dial 323-794-2590 and provide the conference ID 2311990. A live audio webcast of the event and accompanying slides may also be accessed through the "Events and Presentations" page of the "Investors and Media" section of the company's website. A replay of the webcast will be available for 30 days following the event.

About KSI-301

KSI-301 is an investigational anti-VEGF therapy built on Kodiak's Antibody Biopolymer Conjugate (ABC) Platform and is designed to maintain potent and effective drug levels in ocular tissues for longer than existing available agents. Kodiak's objective with KSI-301 is to develop a new first-line agent to improve outcomes for patients with retinal vascular diseases and to enable earlier treatment and prevention of vision loss for patients with diabetic eye disease. The KSI-301 clinical program is designed to assess KSI-301's durability, efficacy and safety in wet AMD, DME, RVO and non-proliferative DR (without DME) through clinical studies run in parallel. The Company's DAZZLE and DAYLIGHT pivotal studies in patients with treatment-naïve wet AMD, GLEAM and GLIMMER pivotal studies in patients with diabetic macular edema, and the BEACON pivotal study in patients with retinal vein occlusion are anticipated to form the basis of the Company's initial BLA to support potential approval and commercialization in multiple indications and with a full range of labeled and reimbursable dosing frequencies in each indication. An additional Phase 3 pivotal study, GLOW, in patients with non-proliferative diabetic retinopathy is also underway. The global KSI-301 clinical program is being conducted at 150+ study sites in more than 10 countries. Kodiak is developing KSI-301 and owns global rights to KSI-301.

About the BEACON Study

The Phase 3 BEACON study is a global, multi-center, randomized study designed to evaluate the durability, efficacy and safety of KSI-301 in patients with treatment-naïve macular edema due to retinal vein occlusion (RVO), including both branch and central subtypes. Patients are randomized to receive either intravitreal KSI-301 every eight weeks after only two loading doses or monthly intravitreal aflibercept per its label, for the first six months. In the second six months, patients in both groups will receive treatment on an individualized basis per protocol-specified criteria. Following this, patients can continue to receive KSI-301 for an additional six months on an individualized basis. The study has enrolled over 550 patients worldwide. The primary endpoint is at six months, and patients will be treated and followed for 18 months. Additional information about the BEACON study (also called Study KS301P103) can be found on www.clinicaltrials.gov under Trial Identifier NCT04592419 (https://clinicaltrials.gov/show/NCT04592419).

About the DAYLIGHT Study

The Phase 3 DAYLIGHT study is a global, multi-center, randomized pivotal study designed to evaluate the efficacy and safety of high-frequency KSI-301 in patients with treatment-naïve wet AMD. Patients are randomized to receive either KSI-301 on a monthly dosing regimen or to receive standard-of-care aflibercept. The study is expected to enroll approximately 500 patients worldwide. The primary endpoint is at ten months, and the study is being planned and executed to allow for inclusion of its results in the initial BLA for KSI-301. The intent of this pivotal study is to broaden KSI-301's potential product labeling, explore the potential for improved treatment outcomes in certain patients with intensive anti-VEGF treatment, and eliminate possible barriers to market access and insurance reimbursement that have impeded or complicated the commercial uptake of other anti-VEGF medications in the past. We believe that pursuing a broad product label will provide physicians with the flexibility, agency, and reimbursement confidence required to consider KSI-301 treatment for all their patients. Additional information about DAYLIGHT (also called Study KS301P107) can be found on www.clinicaltrials.gov under Trial Identifier NCT04964089 (https://clinicaltrials.gov/show/NCT04964089)

About the GLEAM and GLIMMER Studies

The Phase 3 GLEAM and GLIMMER studies are global, multi-center, randomized pivotal studies designed to evaluate the durability, efficacy and safety of KSI-301 in patients with treatment-naïve diabetic macular edema (DME). In each study, patients are randomized to receive either intravitreal KSI-301 on an individualized dosing regimen every eight to 24 weeks after only three loading doses or intravitreal aflibercept every eight weeks after five loading doses per its label. Each study is expected to enroll approximately 450 patients worldwide. The primary endpoint for both studies is at one year, and patients will be treated and followed for two years. Additional information about GLEAM (also called Study KS301P104) and GLIMMER (also called Study KS301P105) can be found on www.clinicaltrials.gov under Trial Identifiers NCT04611152 and NCT04603937, respectively (https://clinicaltrials.gov/ct2/show/NCT04611152 and https://clinicaltrials.gov/ct2/show/NCT04603937).

About Kodiak Sciences Inc.

Kodiak (Nasdaq: KOD) is a biopharmaceutical company committed to researching, developing and commercializing transformative therapeutics to treat high prevalence retinal diseases. Founded in 2009, we are focused on bringing new science to the design and manufacture of next generation retinal medicines to prevent and treat the leading causes of blindness globally. Our ABC Platform™ uses molecular engineering to merge the fields of antibody-based and chemistry-based therapies and is at the core of Kodiak's discovery engine. Kodiak's lead product candidate, KSI-301, is a novel anti-VEGF antibody biopolymer conjugate being developed for the treatment of retinal vascular diseases including wet age-related macular degeneration, the leading cause of blindness in elderly patients in the developed world, and diabetic eye diseases, the leading cause of blindness in working-age patients in the developed world. Kodiak has leveraged its ABC Platform to build a pipeline of product candidates in various stages of development including KSI-501, our bispecific anti-IL-6/VEGF biopolymer conjugate for the treatment of neovascular retinal diseases with an inflammatory component, and we are expanding our early research pipeline to include ABC Platform based triplet inhibitors for multifactorial retinal diseases such as dry AMD and glaucoma. Kodiak is based in Palo Alto, CA. For more information, please visit www.kodiak.com.

Forward-Looking Statements

This release contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. These forward-looking statements are not based on historical fact and include statements regarding the anti-VEGF effect of KSI-301, the expected advances for treatment of wet AMD represented by KSI-301, the

anticipated safety profile for KSI-301, the potential of our ABC Platform to significantly extend treatment intervals in retinal disorders in a safe and convenient manner, future development plans, including clinical objectives and the timing thereof, anticipated design and benefits of planned clinical trials, and the anticipated presentation of data; potential for a single BLA submission in wet AMD, DME and RVO; the potential for our products to obtain a product label in multiple indications and with a full range of labeled and reimbursable dosing frequencies in each indication; and the results of our research and development efforts and our ability to advance our product candidates into later stages of development. Forward-looking statements generally include statements that are predictive in nature and depend upon or refer to future events or conditions, and include words such as "may," "will," "should," "would," "could," "expect," "plan," "believe," "intend," "pursue," and other similar expressions among others. Any forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risk that preliminary safety, efficacy and durability data for our KSI-301 product candidate may not continue or persist; the risk that KSI-301 may not have the anti-VEGF effect or impact on the treatment of wet AMD expected; cessation or delay of any of the ongoing clinical studies and/or our development of KSI-301 may occur, including as a result of the ongoing COVID-19 pandemic; the risk that our ABC Platform may not extend treatment intervals in retinal disorders as anticipated, or at all; future potential regulatory milestones of KSI-301, including those related to current and planned clinical studies, may be insufficient to support regulatory submissions or approval; our research and development efforts and our ability to advance our product candidates into later stages of development may fail; any one or more of our product candidates may not be successfully developed, approved or commercialized; adverse conditions in the general domestic and global economic markets, including the COVID-19 pandemic, which may significantly impact our business and operations, including our clinical trial sites, as well as the business or operations of our manufacturers, contract research organizations or other third parties with whom we conduct business; as well as the other risks identified in our filings with the Securities and Exchange Commission. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in our most recent Form 10-Q, as well as discussions of potential risks, uncertainties, and other important factors in our subsequent filings with the Securities and Exchange Commission. These forward-looking statements speak only as of the date hereof and Kodiak undertakes no obligation to update forward-looking statements, and readers are cautioned not to place undue reliance on such forward-looking statements. Kodiak®, Kodiak Sciences®, ABC™, ABC Platform™ and the Kodiak logo are registered trademarks or trademarks of Kodiak Sciences Inc. in various global jurisdictions.

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