PRESS RELEASE

ASLAN PHARMACEUTICALS PROVIDES YEAR-END UPDATE ON ITS EBLASAKIMAB AND FARUDODSTAT PROGRAMS

- **Following the successful TREK-AD Phase 2b study of *eblasakimab* in moderate-to-severe atopic dermatitis, process is underway to identify potential partners.**
- **Recruitment in TREK-DX, studying *eblasakimab* in *dupilumab*-experienced patients, using updated criteria based on findings from TREK-AD, has commenced at US sites, with additional sites in Europe expected to open in the first half of 2024.**
- **Review of blinded safety data emerging from FAST-AA study of *farudodstat* in alopecia areata shows no emerging liver or other safety concerns, supporting the broadening of enrollment criteria to include less severe patients. Topline interim data readout is now expected mid-2024.**
- **Translational work demonstrating *eblasakimab*'s potential in COPD, with head-to-head data suggesting possible benefits over *dupilumab,* support potential of *eblasakimab* to address a wide range of AD comorbidities.**

San Mateo, California, and Singapore, December 12, 2023 – ASLAN Pharmaceuticals Ltd. (Nasdaq: ASLN), a clinical-stage, immunology focused biopharmaceutical company developing innovative treatments to transform the lives of patients, today provided a business update and updates related to its programs, *eblasakimab* and *farudodstat*.

"Throughout 2023, ASLAN made major progress on multiple fronts – advancing both of our lead programs, *eblasakimab* and *farudodstat* in Phase 2 testing, and establishing business development collaborations to further the development and utilization of *eblasakimab*," said **Dr Carl Firth, Chief Executive Officer, ASLAN Pharmaceuticals.** "The results from the TREK-AD study demonstrated *eblasakimab's* potential to deliver a monthly dosing regimen in atopic dermatitis, AD, without compromising on efficacy, and become a leading therapy in AD. In addition, we are very encouraged by data from head-to-head translational studies that demonstrate *eblasakimab*'s unique mechanism of action targeting the IL-13 receptor elicits a different response and cytokine profile compared to *dupilumab*. This provides a basis for *eblasakimab*'s differentiated clinical profile and suggests that it could be efficacious in patients that do not experience an adequate response to *dupilumab* – something we are testing in our TREK-DX trial. Excitingly, in head-to-head experiments using a human COPD lung model, we have observed *eblasakimab* deliver stronger effects compared to *dupilumab*, and we look forward to publishing further data from these studies next year.

"In 2024, we will continue advancing *farudodstat* as a novel treatment for alopecia areata, or AA," **Dr Firth continued**. "Unlike other DHODH inhibitors, we have not seen emerging liver or other safety concerns in our review of the blinded safety data from the FAST-AA study. We believe that having an effective drug without the safety liabilities of the JAK inhibitors could provide a valuable treatment option for patients. On this basis, we have broadened the enrollment criteria to include less severe AA patients, who we believe could also benefit but may not be eligible for current approved systemic treatments or other ongoing trials. Finally, as part of our efforts to reduce our cash burn in 2024, we recently amended the terms of our loan agreement with K2 HealthVentures to substantially reduce the total payments due over the next 12 months."

Eblasakimab update

ASLAN is conducting clinical trials of its lead program, *eblasakimab,* in adult, moderate-to-severe AD patients. In July, ASLAN announced positive topline results from a Phase 2 TREK-AD study that demonstrated *eblasakimab*'s potential as the first biologic in moderate-to-severe AD to demonstrate a competitive efficacy profile with once-monthly dosing from initiation. In October, new data was presented from an analysis of patients with severe disease (baseline Eczema Area and Severity Index [EASI] score at least 21), showing a marked widening in placebo-adjusted efficacy. ASLAN has engaged Seth J. Orlow, MD PhD, of the specialist firm, Pharus, with deep and extensive industry relationships in dermatology, to advise on global partnership discussions for *eblasakimab*.

ASLAN is also evaluating *eblasakimab* in the Phase 2 TREK-DX study in *dupilumab*-experienced, moderate-to-severe AD patients. 63% of *dupilumab*-treated patients fail to achieve clear or nearly clear skin (Investigator's Global Assessment [IGA] score of 0 or 1) after 16 weeks[1], and around half of those patients that do achieve this response do not maintain it after the subsequent 36 weeks[2], so this is a sizable patient population that lacks safe, long-term alternative treatment options. Based on findings from the TREK-AD study, which highlighted the changing patient population in the US, the TREK-DX inclusion criteria have been modified to enroll patients with an EASI score of at least 18 and independent reviewer confirmation of baseline EASI scores has been implemented. US sites are now recruiting according to the updated criteria and additional sites in Europe are expected to open in the first half of 2024. ASLAN will provide an update in early 2024 on the timing of the expected topline readout from the study in 2024.

For the first time, ASLAN demonstrated the potential utility of *eblasakimab* in an indication beyond AD. Data generated in a human translational model of COPD demonstrated that *eblasakimab* was effective in reducing IL-4 and IL-13 driven airway hyperresponsiveness. Unlike drugs targeting the IL-13 cytokine, *eblasakimab* blocks signaling of both IL-4 and IL-13 through the type 2 receptor, which may provide for utility in a broader range of indications, including those not solely driven by IL-13. New, promising data of head-to-head comparison with *dupilumab* in this translational model will be presented at an upcoming scientific meeting.

Farudodstat update

Farudodstat, a highly selective dihydroorotate dehydrogenase (DHODH) inhibitor, is being investigated for the treatment of AA in the FAST-AA Phase 2 trial. Blinded safety data emerging from the study has shown no liver or other major safety concerns to date in patients enrolled supporting *farudodstat's* improved safety profile compared to the first-generation of approved DHODH inhibitors. *Farudodstat* could, therefore, provide an important treatment option for patients with less severe disease looking for a safe systemic therapy. ASLAN has received approval from the study's Institutional Review Board to expand the enrollment criteria to include patients with 30% or greater hair loss, a milder patient population who currently lack approved systemic treatment options, and is implementing the change to the protocol. JAK inhibitors, which carry several boxed warnings, were recently approved only to treat patients with severe AA. Due to the recent increased availability of approved therapies in severe AA and the expansion of the trial to include moderate AA patients, ASLAN expects topline interim data from the study to be available in mid-2024.

Corporate updates

ASLAN amended the terms of its loan agreement with K2 HealthVentures. In order to substantially reduce the total payments due to K2 HealthVentures over the next 12 months and extend the date from which the Company is required to make monthly repayments to January 2025, ASLAN made a prepayment of $12.0 million which has been applied to the outstanding principal under the loan agreement. $13.0 million of principal now remains outstanding under the loan agreement. The prepayment allows the Company to reduce total cash burn through 2024.

2024 expected milestones

- Selection of a development partner to advance *eblasakimab* into Phase 3 testing in AD and other indications.
- Topline readout from the TREK-DX study of *eblasakimab.*
- Topline interim data readout from FAST-AA study of *farudodstat* in AA in mid-2024.
- Publication and presentation of further data from the TREK-AD study of *eblasakimab,* including biomarker data, and on *farudodstat* at major congresses.

Upcoming conference attendance

ASLAN's management team will be participating in the Dermatology Summit in San Francisco on January 7, 2024, at the Hyatt Regency, and the LifeSci Corporate Access Event at the Beacon Grand Hotel, San Francisco, from January 8-10, 2024.

1. Thaci et al (2019) J Dermatol Sci 94(2):266-275
2. Worm et al (2020) JAMA Derm 156(2):131-143

About *eblasakimab*

Eblasakimab is a potential first-in-class monoclonal antibody targeting the IL-13 receptor subunit of the Type 2 receptor, a key pathway driving several allergic inflammatory diseases. *Eblasakimab*'s unique mechanism of action enables specific blockade of the Type 2 receptor and has the potential to improve upon current biologics used to treat allergic disease. By blocking the Type 2 receptor, *eblasakimab* prevents signaling through both interleukin 4 (IL-4) and interleukin 13 (IL-13) – the key drivers of inflammation in AD. Positive results from the Phase 2b TREK-AD study in moderate-to-severe AD support *eblasakimab*'s potential to deliver a monthly dosing regimen from initiation in AD without compromising on efficacy and with an encouraging safety profile demonstrated to date, with preparations for Phase 3 underway. ASLAN is also investigating *eblasakimab* in *dupilumab* experienced, moderate-to-severe AD patients in the Phase 2 trial, TREK-DX.

About *farudodstat*

Farudodstat is a potent, oral dihydroorotate dehydrogenase (DHODH) inhibitor that suppresses immune cell proliferation and IFN-γ secretion by blocking *de novo* production of pyrimidines required for DNA replication. Compared to first-generation DHODH inhibitors, *farudodstat* has been shown to be approximately 30 times more potent in its inhibition of DHODH and T cell activity and has demonstrated a well-tolerated safety profile. ASLAN has generated data showing that *farudodstat* can potentially protect against the loss of immune privilege in hair follicles, supporting its potential as a first-in-class treatment option for alopecia areata (AA). A Phase 2a proof-of-concept trial in AA is currently underway with an interim readout expected in mid-2024.

About ASLAN Pharmaceuticals

ASLAN Pharmaceuticals (Nasdaq: ASLN) is a clinical-stage, immunology-focused biopharmaceutical company developing innovative treatments to transform the lives of patients. ASLAN is developing *eblasakimab*, a potential first-in-class antibody targeting the IL-13 receptor in moderate-to-severe atopic dermatitis (AD) with the potential to improve upon current biologics used to treat allergic disease, and has reported positive topline data from a Phase 2b dose-ranging study in moderate-to-severe AD patients. ASLAN is also developing *farudodstat*, a potent oral inhibitor of the enzyme dihydroorotate dehydrogenase (DHODH) as a potential first-in-class treatment for alopecia areata (AA) in a Phase 2a, proof-of-concept trial with an interim readout expected in mid-2024. ASLAN has teams in San Mateo, California, and in Singapore. For additional information please visit the Website or follow ASLAN on LinkedIn.

Forward-looking statements

This release contains forward-looking statements. These statements are based on the current beliefs and expectations of the management of ASLAN Pharmaceuticals Limited and/or its affiliates (the "Company"). These forward-looking statements may include, but are not limited to statements regarding the Company's business strategy and clinical development plans; the Company's plans to develop and commercialize *eblasakimab* and *farudodstat*; the safety and efficacy of *eblasakimab* and *farudodstat*; the Company's plans and expected timing with respect to manufacturing activities, clinical trials, clinical trial enrolment and clinical trial results for *eblasakimab* and *farudodstat*; the potential of *eblasakimab* as a first-in-class treatment for atopic dermatitis and of farudodstat as a first-in-class treatment for alopecia areata; the potential benefits, capabilities and results of the Company's collaboration efforts; and the Company's cash runway. The Company's estimates, projections and other forward-looking statements are based on management's current assumptions and expectations of future events and trends, which affect or may affect the Company's business, strategy, operations, or financial performance, and inherently involve significant known and unknown risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of many risks and uncertainties, which include, unexpected safety or efficacy data observed during preclinical or clinical studies; the fact that results of earlier studies and trials may not be predictive of future trial results; clinical site activation rates or clinical trial enrolment rates that are lower than expected; the impact of the COVID-19 pandemic, the ongoing conflict between Ukraine and Russia and bank failures on the Company's business and the global economy; general market conditions; changes in the competitive landscape; and the Company's ability to obtain sufficient financing to fund its strategic and clinical development plans. Other factors that may cause actual results to differ from those expressed or implied in such forward-looking statements are described in the Company's US Securities and Exchange Commission filings and reports (Commission File No. 001-38475), including the Company's Annual Report on Form 20-F filed with the US Securities and Exchange Commission on March 24, 2023. All statements other than statements of historical fact are forward-looking statements. The words "believe," "may," "might," "could," "will," "aim," "estimate," "continue," "anticipate," "intend," "expect," "plan," or the negative of those terms, and similar expressions that convey uncertainty of future events or outcomes are intended to identify estimates, projections, and other forward-looking statements. Estimates, projections, and other forward-looking statements speak only as of the date they were made, and, except to the extent required by law, the Company undertakes no obligation to update or review any estimate, projection, or forward-looking statement.

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