PRESS RELEASE

ASLAN PHARMACEUTICALS PRESENTS LATE-BREAKING TRANSLATIONAL DATA ON EBLASAKIMAB IN COPD AT THE AMERICAN THORACIC SOCIETY INTERNATIONAL CONFERENCE

- **Translational data presented during a late-breaker poster session from a head-to-head study of *eblasakimab* and *dupilumab* in a human tissue model of COPD indicates that *eblasakimab* performed better than *dupilumab* in improving airway function and enhancing bronchodilation at the same concentrations**
- **Results support further investigation of *eblasakimab* as a potential therapeutic option for COPD with potentially more effective blockade of Type-2 mediated inflammatory effects in lung tissue**

San Mateo, California, and Singapore, May 21, 2024 – ASLAN Pharmaceuticals (Nasdaq: ASLN), a clinical-stage, immunology-focused biopharmaceutical company developing innovative treatments to transform the lives of patients, today announced the late-breaking poster presentation of translational data from head-to-head studies of *eblasakimab* and *dupilumab* in human healthy and COPD-derived lung tissue models at the American Thoracic Society (ATS) International Conference 2024 in San Diego, California.

"We are pleased to present the translational data that we have generated on *eblasakimab* in COPD at this prestigious conference. *Eblasakimab* showed significant improvement across all measured bronchial outcomes, a result we believe may be attributed to the potential of *eblasakimab* to inhibit the Type 2 receptor complex more efficiently than approved biologics, resulting in greater reduction in Th2 cytokine activity. Since airway hyperresponsiveness is clinically shared across asthma, COPD, and other lung disorders, these data support the further investigation of *eblasakimab* in a range of Type 2-driven lung conditions," **said Dr Carl Firth, Chief Executive Officer, ASLAN Pharmaceuticals.**

ATS 2024 International Conference presentation details:

Late-breaker poster presentation

Eblasakimab Significantly Alleviates IL-4 and IL-13 Induced Bronchial Airway Constriction in COPD-Derived Lung Slices (Poster ID 13753)

Type 2 inflammation is observed in 30-40% of COPD patients[1] and during exacerbations, characterized by impaired airflow, obstruction, and dyspnea[2]. Interleukin-4 (IL-4) and interleukin-13 (IL-13) are central mediators of Type 2 inflammation[3] and are implicated in various mechanisms of airway obstruction in asthma[4], suggesting they may play an essential role in COPD[4]. Blocking dual IL-4 and IL-13 signaling may have the potential to prevent bronchoconstriction. This was tested using the precision cut-lung slices (PCLS) model of COPD by treatment with *dupilumab* and *eblasakimab* which target different receptor subunits of the IL-4 and IL-13 signaling pathway.

PCLS from a 66-year-old male with no known history of lung diseases (healthy PCLS) and a 67-year-old female with COPD (COPD PCLS) were used to test constriction and dilation responses to different treatment conditions including IL-4, IL-13, methacholine (bronchoconstrictor), formoterol (dilatory agent), and a range of concentrations of *dupilumab* and *eblasakimab*.

In both healthy and COPD-derived lung tissues, *eblasakimab* significantly reduced IL-4- and IL-13-induced bronchial airway constriction. In IL-4 and IL-13 pre-treated healthy lung tissues, *eblasakimab* further restored formoterol-induced airway dilation, significantly better than *dupilumab* at the lower concentration, and improved methacholine-induced constriction. The results suggest *eblasakimab* may provide a therapeutic benefit in reducing IL-4- and IL-13-

induced airway hyperresponsiveness and that *eblasakimab* may provide relief in situations of acute airway constriction.

In COPD PCLS, *eblasakimab* showed significant improvement across all measured bronchial outcomes whereas *dupilumab*, tested at the same concentrations, did not achieve statistical significance relative to placebo for all measures. This suggests that *eblasakimab* may potentially provide stronger relief against bronchoconstriction as well as improved dilatory function in COPD compared to *dupilumab*.

The results support further investigation of *eblasakimab* as a therapeutic option for COPD with potentially more effective blockade of Type-2 mediated effects in lung tissue and improvement in bronchoconstriction.

A copy of the poster is available to view online in the Publications section of ASLAN's website.

1. Singh et al (2014) Eur Resp Journal 44: 1697-1700
2. Celli BR, et al (2023) Am J Respir Crit Care Med 207(9):1134-1144
3. Bao K & Reinhardt RL (2015) Cytokine 75(1):25-37
4. Oishi K et al (2020) J Clin Med 9(8):2670

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 and Type 2-driven COPD. ASLAN announced positive results from the Phase 2b TREK-AD study of *eblasakimab* in moderate-to-severe AD patients in July 2023, and is currently investigating *eblasakimab* in *dupilumab*-experienced, moderate-to-severe AD patients in the Phase 2 trial, TREK-DX.

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 currently investigating *eblasakimab* in *dupilumab*-experienced, moderate-to-severe AD patients in the TREK-DX Phase 2 trial, with topline data expected at the end of 2024. 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 Q3 2024. ASLAN has teams in San Mateo, California, and in Singapore. For additional information please visit the ASLAN 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 the Company. These forward-looking statements may include, but are not limited to statements regarding the Company's business strategy and clinical development plans; statements related to the safety and efficacy of *eblasakimab*, including interim results; the Company's plans and expected timing with respect to clinical trials, clinical trial enrollment and clinical trial results for *eblasakimab*; and the potential of *eblasakimab* as a first-in-class treatment for atopic dermatitis, and in Type-2 receptor-driven lung conditions. 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; risks that future clinical trial results may not be consistent with interim, initial or preliminary results or results from prior preclinical studies or clinical trials; clinical site activation rates or clinical trial enrollment rates that are lower than expected; the impact of health epidemics or pandemics, or geopolitical conflicts on the Company's operations, research and development and clinical trials and potential disruption in the operations and business of third-party manufacturers, contract research organizations, other service providers and collaborators with whom the Company conducts business; general market conditions; changes in the competitive landscape; the Company's ability to obtain and maintain intellectual property protection for product candidates; 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 April 12, 2024. 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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