



PRESS RELEASE

ASLAN PHARMACEUTICALS TO DEVELOP ASLAN003 AS NEXT GENERATION DHODH INHIBITOR IN AUTOIMMUNE CONDITIONS

- ASLAN believes ASLAN003 has the potential to be the most potent oral inhibitor of DHODH currently in development for autoimmune disease, more than 30 times more potent at inhibiting the DHODH enzyme than *teriflunomide*
- ASLAN appoints neurologist Professor Gavin Giovannoni as a scientific advisor to establish clinical development strategy in multiple sclerosis
- With nanomolar potency against SARS-CoV-2, ASLAN003 is also being assessed for its potential as a novel therapeutic for COVID-19 and other viruses

Singapore, 16 October 2020 – ASLAN Pharmaceuticals (Nasdaq:ASLN), a clinical-stage immunology focused biopharmaceutical company developing innovative treatments to transform the lives of patients, today announced that it plans to develop ASLAN003, its next generation inhibitor of dihydroorotate dehydrogenase (DHODH), in autoimmune conditions, such as multiple sclerosis (MS).

ASLAN003 is a highly selective and potent inhibitor of human DHODH (IC₅₀ = 35 nM) and has been shown to be more than 30 times more potent at inhibiting the DHODH enzyme in cell free and cell-based assays than the first generation inhibitor *teriflunomide*. In preclinical studies, ASLAN003 was shown to be efficacious in animal models of MS and other autoimmune diseases. Based on the specificity, potency and favourable safety profile identified in earlier clinical studies, ASLAN believes ASLAN003 is a promising candidate for development in these diseases, where a pressing need for differentiated and convenient treatment options exists.

Dr Carl Firth, Chief Executive Officer, ASLAN Pharmaceuticals, said: *“Following our review of the data we have generated on ASLAN003 and discussions with experts in the field, we believe ASLAN003 has a potential best in class profile as the most potent oral DHODH inhibitor targeting autoimmune indications. There is a current need for a differentiated therapeutic approach to MS that can deliver improved efficacy and addresses the risks of toxicity associated with this and other classes of drug in the field.”*

Inhibition of DHODH is an established mechanism for the treatment of autoimmune conditions, notably relapsing-remitting multiple sclerosis (RRMS). First generation DHODH inhibitors have limited efficacy and, like many other treatment options for RRMS, have associated toxicities requiring safety monitoring that make them less suited as long term treatment options. ASLAN003 has been shown to be well tolerated at doses up to 400 mg/day in 119 subjects across Phase 1 and Phase 2 clinical studies and is suitable for once-daily oral dosing.

ASLAN has appointed renowned neurologist Professor Gavin Giovannoni, Chair of Neurology, Blizard Institute, Barts and The London School of Medicine and Dentistry, as a scientific advisor to the Company and will work with him on the clinical development plan of ASLAN003. The company expects to share further details in early 2021.

Professor Gavin Giovannoni, scientific advisor to ASLAN, added: *“New and effective treatment approaches with improved safety, efficacy and convenience are highly sought after by the MS community. ASLAN003’s potency and favourable safety profile make it a promising next generation DHODH inhibitor and I look forward to working with the team to define novel clinical development strategies for the benefit of patients.”*



ASLAN has previously observed anti-viral activity of ASLAN003 against Dengue and Zika viruses and recently determined that ASLAN003 has nanomolar potency against SARS-CoV-2 in Vero E6 cells ($EC_{50} = 1.4 \text{ nM}$). ASLAN is currently assessing the potential of ASLAN003 as a treatment for COVID-19 and other viral infections and will provide an update when clinical development plans have been determined.

In 2019, ASLAN completed a Phase 2 study testing ASLAN003 in AML. Following an internal strategic review and noting changes in the AML treatment landscape, ASLAN will be focusing the future development of ASLAN003 in autoimmune disease.

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About ASLAN Pharmaceuticals

ASLAN Pharmaceuticals (Nasdaq:ASLN) is a clinical-stage immunology focused biopharmaceutical company developing innovative treatments to transform the lives of patients. Led by a senior management team with extensive experience in global development and commercialisation, ASLAN has a clinical portfolio comprised of a first-in-class monoclonal therapy, ASLAN004, that is being developed in atopic dermatitis and other immunology indications, and ASLAN003, which it plans to develop for autoimmune disease. For additional information please visit www.aslanpharma.com.

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 ASLAN003 in autoimmune disease, COVID-19 and other viral infections, the safety and efficacy of ASLAN003, and the Company's plans and expected timing with respect to its clinical trials for ASLAN003 and clinical and preclinical study results for ASLAN003. 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 these risks and uncertainties, which include, without limitation the risk factors described in the Company's U.S. Securities and Exchange Commission filings and reports (Commission File No. 001-38475), including the Company's Form 20-F filed with the U.S. Securities and Exchange Commission (the "SEC") on April 16, 2020.

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.