

4th November 2016

ATL1102 for Multiple Sclerosis – Progress Update

Antisense Therapeutics ("ANP" or the "Company") continues to interact with potential pharmaceutical partners regarding the ongoing development of ATL1102 for Multiple Sclerosis. To this end, Mark Diamond, Managing Director and CEO of Antisense Therapeutics along with other Company representatives attended a number of meetings in the US in September 2016 relating to the ATL1102 for MS project. Further updates will be provided by the Company on any material progress.

The Company remains firmly of the belief that ATL1102 in MS is a program that justifies continued development and an asset that should be attractive to potential pharmaceutical partners. In parallel with the partnering interactions, given the protracted nature of this process and timeline that is outside of the Company's direct control, ANP continues to add value and move this program forward by preparing Investigational New Drug (IND) submission to the US Food and Drug Administration (FDA), seeking other development opportunities and progressing non-dilutive funding initiatives for the conduct of the Phase IIb trial.

Phase IIb Investigational New Drug (IND) submission and non-dilutive funding

The Company's IND application for a Phase IIb trial in 195 MS patients is in its final stages of preparation. The submission to the FDA is now forecast for early 2017 due to delays encountered with the relevant authorities issuing of the requisite permits for the shipment of samples of monkey plasma from China to the US so that pharmacokinetic data can be generated from a previously conducted animal toxicology study for inclusion in the IND application. These permits have now been issued and the samples shipped for analysis.

The Company expects an IND clearance for a Phase IIb trial of ATL1102 would enhance its commercialisation efforts.

With the assistance of consulting firm FreeMind who specialise in helping life science organisations secure non-dilutive funding from US Federal Agencies and Private Foundations, the Company anticipates making an application after IND clearance for an appropriate award grant that has been identified of the type and size (>US\$10 million) that would fund the conduct of the Phase IIb trial.

Investigative study and Early Access Program

As previously reported, ANP is proposing to undertake a smaller (est. 12 patients) investigative study of ATL1102 in relapsing SP-MS patients in Germany with Professor Volker Limmroth (Cologne City Hospital, Department of Neurology, Germany), the Principal Investigator of our successful Phase IIa study.

In August 2016, an application was submitted to the National Multiple Sclerosis Society in the US for grant funding to conduct this study. The notice of successful grants is expected in February 2017, which could allow for a potential study start in early Q2'17. Drug compound is available for this study and should the grant be awarded, ANP expects to be reimbursed for the drug compound costs.

This investigative study would be expected to generate important and supportive data on the use of ATL1102 in the SP-MS patient population that would allow for the potential treatment of SP-MS patients under an Early Access Program (EAP). myTomorrows and ANP expect to activate the EAP on the back of positive data from this study which could be available later in 2017.



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About Antisense Therapeutics Limited

Antisense Therapeutics Limited is an Australian publicly listed biopharmaceutical drug discovery and development company. Its mission is to create, develop and commercialise second generation antisense pharmaceuticals for large unmet markets. Antisense Therapeutics has 4 products in its development pipeline that it has in-licensed from Ionis Pharmaceuticals Inc. (formerly Isis Pharmaceuticals Inc.), a world leader in antisense drug development and commercialisation - ATL1102 (injection) which has successfully completed a Phase II efficacy and safety trial, significantly reducing the number of brain lesions in patients with relapsing-remitting multiple sclerosis (RRMS), ATL1103 drug targeting the growth hormone receptor which in a Phase II clinical trial, successfully reduced blood IGF-1 levels in patients with the growth disorder acromegaly, ATL1102 (inhaled) which is at the pre-clinical research stage as a potential treatment for asthma and ATL1101 a second-generation antisense drug at the pre-clinical stage being investigated as a potential treatment for cancer.

About MS

Multiple Sclerosis (MS) is a life-long, chronic disease that progressively destroys the central nervous system (CNS). It affects approximately 400,000 people in North America and more than 2 million worldwide and the current market for MS drugs is estimated at more than USD\$14 billion. It is a disease that affects more women than men, with onset typically occurring between 20 and 40 years of age. Symptoms of MS may include vision problems, loss of balance, numbness, difficulty walking and paralysis. In Australia MS affects over 20,000 people. **Relapsing-Remitting MS (RR-MS):** People with this type of MS experience clearly defined attacks of worsening neurologic function. These attacks—which are called relapse or exacerbations —are followed by partial or complete recovery periods (remissions), during which no disease progression occurs. Approximately 85% of people are initially diagnosed with relapsing-remitting MS. **Secondary-progressive MS (SP-MS)** occurs when after an initial period of relapsing-remitting MS, many people develop a secondary-progressive disease course in which the disease worsens more steadily, with or without occasional flare-ups, minor recoveries (remissions), or plateaus. Before the disease-modifying medications became available, approximately 50% of people with relapsing-remitting MS developed this form of the disease within 10 years.

Early Access Program

Early Access Programs allow biopharmaceutical companies to provide eligible patients with ethical access to investigational medicines for unmet medical needs within the scope of the existing early access legislation. Access is provided in response to physician requests where other treatments have been unsuccessful and no alternative or appropriate treatment options are available to these patients.

ATL1102 background Information

ATL1102 is an antisense inhibitor of CD49d, a subunit of VLA-4 (Very Late Antigen-4). Antisense inhibition of VLA-4 expression has demonstrated activity in a number of animal models of inflammatory disease including asthma and MS with the MS animal data having been published in a peer reviewed scientific journal. ATL1102 was shown by the Company to reduce MS lesions in a Phase IIa clinical trial in RRMS patients and the data have been published (Limmroth, V. et al Neurology, 2014; 83(20): 1780-1788).