

1 June 2016

Antisense Technology Update

Antisense Therapeutics (“ANP” or the “Company”) wishes to address shareholder queries that have arisen following recent reports of some severe platelet reductions noted by Ionis Pharmaceuticals (ANP’s technology collaboration partner) in two late stage clinical trials for their drugs IONIS-TTR_{Rx} and Volanesorsen.

With respect to ANP’s own clinical trial experience and as previously reported, both ATL1102 for Multiple Sclerosis (MS) and ATL1103 for acromegaly have completed successful Phase II clinical trials in patients.

In the Phase II trial of ATL1102 in Relapsing-Remitting MS patients, platelet reductions to below the normal range occurred in a third of patients in the ATL1102 group (viewed as mild to moderate thrombocytopenia not accompanied with any clinical consequences) at the dose tested (600mg/week [3 x 200mg] for the first week and 400mg/week [2 x 200mg] for the following 7 weeks. Limmroth, V. et al *Neurology*, 2014; 83(20): 1780-1788). As previously communicated and as noted in the *Neurology* publication*, future trials contemplate dosing of ATL1102 to be 200mg/week or possibly lower. The lower dosing in longer-term studies is also expected to ameliorate potential side effects, including the platelet reductions.

ATL1103 has been dosed in clinical trials in acromegalic patients up to 600mg/week (twice weekly 300mg) with no severe platelet reductions reported after 13 weeks of dosing.

Platelet levels are routinely monitored in clinical studies and will continue to be a feature of all ATL’s clinical trial protocols moving forward. It is relevant to note that platelet levels are easily monitored (simple blood test) and reductions are reversible upon cessation of dosing.

The Company will continue to monitor and update the market should there be any material developments in regard to this potential safety parameter. ANP continues to progress its plans for ATL1102 and ATL1103 as outlined in our 24 May 2016 Company Strategy Update announcement.

Contact Information:

Website: www.antisense.com.au

Managing Director: Mark Diamond +61 (0) 3 9827 8999

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 designed to block GHR production 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.

*Limmroth, V. et al *Neurology*, 2014, pp. 6-7. "...ATL1102 demonstrated an increasing effect over time with T1 Gd lesion reductions by week 8 and the greatest T1 Gd lesion reductions observed at week 12, 4 weeks after the last dose. This extended duration of activity post dosing of ATL1102 was potentially related to the time course for the formation-turnover of new enhancing lesions and the drug’s long (>3 weeks) tissue half-life. This extended duration of action supports the proposition of less frequent or lower dosing in longer-term studies than the twice weekly 200-mg dosing employed in the current trial. Pharmacometric modeling suggests 200 mg once weekly, every other week, and every 3 weeks over 6 months has the potential to significantly reduce MRI brain lesions and to minimize side effects including platelet reductions. This dosing schedule could be employed in longer-term clinical trials..."