

9 May 2016

ATL1103 Higher Dose Study - Update

Antisense Therapeutics (ASX: ANP or "the Company") is pleased to provide the following update on the ATL1103 higher dose study.

The ATL1103 higher dose trial is an open-label study of the safety, tolerability, pharmacokinetics and efficacy [effect on reducing serum insulin like growth factor I (sIGF-I)] of ATL1103 in 4 adult acromegaly patients dosed with ATL1103 up to 300mg twice weekly for 13 weeks.

Dosing of three patients with ATL1103 has now been completed. The patients received all 26 doses of ATL1103 and two patients have also now completed their 8 week follow up period. There were no reports of any serious adverse events related to dosing with ATL1103.

The principal investigator of the study, Dr David Torpy, an endocrinologist at the Royal Adelaide Hospital, has requested that the 3rd patient continue dosing with ATL1103 as they have responded well to treatment with ATL1103 where previous treatment with surgery, radiotherapy and available first line pharmaceutical therapies have not lead to disease control. As a result, a protocol amendment to the study has been approved by the Adelaide Hospital Ethics Committee for ongoing dosing of this patient for an additional 12 weeks. As well as being of potential ongoing benefit to the patient, this additional treatment period will provide ANP with valuable data on the effects of longer dosing with ATL1103.

ANP now anticipates submitting an amendment to the study protocol for approval to conduct an interim analysis on all 3 patients who have completed the initial 13 weeks of dosing. This interim analysis will assess the change (percentage reduction) from each of the 3 patient's baseline (start of the study) sIGF-I levels to their levels post dosing. The effect of ATL1103 on reducing IGF-I levels is the primary marker of drug activity being assessed in this higher dose study as acromegaly patients have elevated sIGF-I levels compared to the normal population. As to whether a 4th patient is to be enrolled into the study will depend on the outcomes from this interim analysis of the 3 patients already treated.

ANP does not expect any additional material expense for undertaking the extended dosing in the 3rd patient and the conduct of the interim efficacy analysis beyond what the Company is to receive in previously agreed financial reimbursement for the conduct of the study.

Contact Information:

Website: www.antisense.com.au

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

Antisense Therapeutics Limited (ASX: ANP) 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. ANP has 4 products in its development pipeline that it has in-licensed from Isis Pharmaceuticals Inc., world leaders 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-I 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 ATL1103

ATL1103 is a second-generation antisense drug designed to block growth hormone receptor (GHR) expression thereby reducing levels of the hormone insulin-like growth factor-I (IGF-I) in the blood and is a potential treatment for diseases associated with excessive growth hormone and IGF-I action. These diseases include acromegaly, an abnormal growth disorder of organs, face, hands and feet, diabetic retinopathy, a common disease of the eye and a major cause of blindness, diabetic nephropathy, a common disease of the kidney and major cause of kidney failure, and some forms of cancer. Acromegalic patients have significantly higher blood IGF-I levels than healthy individuals. Reduction of these levels to normal is accepted by clinical authorities as the primary marker of an effective drug treatment for the disease. GHR is a clinically validated target in the treatment of acromegaly. In the case of diabetic retinopathy, published clinical studies have shown that treatments producing a reduction in IGF-I levels retarded the progression of the disease and improve vision in patients. Scientific papers have been published on the suppression of blood IGF-I levels in mice (Tachas et al., 2006, J Endocrinol 189, 147-54) and inhibition of retinopathy in a mouse retinopathy model (Wilkinson-Berka et al., 2007, Molecular Vision 13, 1529- 38) using an antisense drug to inhibit the production of GHR. In a Phase I study in healthy subjects, ATL1103 demonstrated a preliminary indication of drug activity, including suppression of IGF-1 and the target GHR (via circulating growth hormone binding protein) levels. In a Phase II trial in acromegalic patients, ATL1103 met its primary efficacy endpoint by showing a statistically significant average reduction in IGF-1 levels from baseline ($P < 0.0001$) at week 14 (one week past the last dose) at the twice weekly 200 mg dose tested. Antisense is currently undertaking a higher dose study in acromegaly patients.