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ATL1103 Patent Update

Antisense Therapeutics Limited (ASX:ANP or "the Company") is pleased to advise of important advancements made in expanding the intellectual property (IP) portfolio protecting ATL1103, an antisense drug targeting the Growth Hormone receptor (GHr), in clinical development for acromegaly. These advancements include both the grant of US patent 9,371,350 (14/137,852) entitled "Modulation of Growth Hormone Receptor Expression and insulin like growth factor expression" and NZ patent 629004 entitled "Combination Therapy comprising a growth hormone variant and an oligonucleotide targeted to the growth hormone receptor."

The US patent 9,371,350 covers ATL1103 and other modified oligonucleotides 12 to 35 nucleobases in length that target GHr and all useful antisense oligonucleotide therapeutics to the GHr capable of reducing serum levels of growth hormone binding protein (GHBP), the extracellular portion of GHr found in the blood. The patent is active until December 2024 and was generated as a block to other antisense approaches (including siRNA and LNA drugs) to GHr where their effect was to reduce GHr and GHBP expression.

As announced in November 2015, results from the completed Phase 2 trial for ATL1103 in adult patients with acromegaly presented at the Society for Endocrinology BES 2015 conference in Edinburgh, UK showed a decrease in GHBP coinciding with a significant reduction in serum levels of Insulin-like Growth Factor-I (sIGF-I). These data provided further evidence for the efficacy of ATL1103 and its ability to inhibit GHr expression and sIGF-I levels.

The NZ patent 629004 covers ATL1103 and other oligonucleotides to GHr for use in combination with Somavert (a GH antagonist), to prevent or treat disease associated with increased levels of sIGF-I such as acromegaly and provides protection to 2032. The patent is based on the synergistic effect observed in animal studies with the use of ATL1103 in combination with Somavert. The NZ patent is the first to grant of the related patent family applications PCT/AU2013/000095 that cover the potential use of ATL1103 in combination with Somavert for enhanced efficacy in patients who do not have their sIGF-I normalized with monotherapies.

The granting of US patent 9371,350 and NZ 629004, further strengthens ANP's extensive portfolio of intellectual property protecting the use of ATL1103 and other antisense compounds to GHr as either monotherapy or use in combination in the treatment of acromegaly and other sIGF-I related diseases. These include patents covering ATL1103 in the US, Europe, Japan, Australia, NZ and Canada.

Additional to this patented IP, ATL1103 for acromegaly was recently granted orphan drug designation by both the US Food and Drug Administration and European Commission which provides incentives including 7 years of market exclusivity in the United States and 10 years of exclusivity in the European Union.

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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-1 (IGF-1) in the blood and is a potential treatment for diseases associated with excessive growth hormone and IGF-1 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-1 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-1 levels retarded the progression of the disease and improve vision in patients. Scientific papers have been published on the suppression of blood IGF-1 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 sIGF-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.

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 Ionis 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.