



ANTISENSE THERAPEUTICS

For release: 24 February 2004

Successful Animal Study Results Demonstrate Potential New Treatment for Growth and Sight Disorders

Highlights

- Demonstration of efficacy in pre-clinical animal studies of new antisense compound
- Results to be presented at International Scientific Symposium
- Outcomes comparable to leading therapeutics
- Major disease applications including acromegaly and diabetic retinopathy
- Patent applications lodged
- Development to commence on new compound (ATL1103)

Results of Animal Studies

Antisense Therapeutics Limited is pleased to announce that an antisense inhibitor designed to block the Growth Hormone receptor (GHR) gene has produced definitive results in an experimental system in mice. This confirms its potential as a treatment for diseases associated with excessive growth hormone action. These diseases include acromegaly (an abnormal growth disorder of organs, face, hands and feet), diabetic retinopathy and wet age-related macular degeneration (AMD). The latter disorders are common diseases of the eye and major causes of blindness.

The targeting of GHR with our proprietary antisense compound inhibits growth hormone activity, thereby reducing levels of the hormone insulin-like growth factor-I (IGF-I) in the blood. Acromegalic patients are known to 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. 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 in patients.

Antisense Therapeutics' animal studies for the GHR antisense compound were conducted at the University of Queensland by Professor Michael Waters, internationally recognised for his research on GHR and disorders related thereto. These studies demonstrated that the compound significantly reduces blood levels of IGF-I in mice, an effect which, if reproduced in humans, should provide therapeutic benefit to acromegaly patients and potentially to diabetic retinopathy sufferers.

The animal study results are to be presented by Dr George Tachas, Antisense Therapeutics' Director of Drug Discovery, at the International GH-IGF Symposium, Cairns, Queensland on April 19, 2004.

Growth and Sight Disorders – Markets, Current Treatments

The most widely used pharmaceutical treatment for acromegaly is the drug octreotide (SandostatinTM), however a significant percentage of patients do not respond to this therapy while other patients experience adverse reactions with this therapy. The latest drug to be approved in Europe and the US for the treatment of acromegaly is pegvisomant (TrovertTM, SomavertTM). Pegvisomant is effective in a larger percentage of patients than octreotide although it requires more frequent (daily) dosing by injection than the long acting form of octreotide which is surgically implanted (intragluteal). Sales of pegvisomant are projected to reach US\$500M per annum.

The study results for our GHr antisense compound are comparable to those achieved by pegvisomant in an equivalent animal model. Our GHr antisense compound may have important clinical advantages over pegvisomant and octreotide, including more convenient route of administration and less frequent dosing.

There are presently no pharmaceutical therapeutics approved for the treatment of diabetic retinopathy. There are also no standard and effective therapies for most AMD patients. Given the high unmet medical need for such diseases the market potential for effective medicines is estimated to be several billion dollars.

Patent applications have been lodged covering all disease indications for GHr antisense.

Outlook

Following the success of the animal efficacy studies and in light of the significant commercial potential of the compound, the company has decided to move this project, named ATL1103, into development. Orders for bulk quantities of the active pharmaceutical ingredient, to be formulated into injectable product for use in the preclinical safety studies, are expected to be placed with our collaboration partner Isis Pharmaceuticals, Inc, within the first half of 2004.

This result from our drug research pipeline confirms Antisense Therapeutics' ability to use the most advanced second generation antisense technology to quickly and inexpensively generate and test new antisense compounds for clinically validated targets in important human diseases.

About Acromegaly

Acromegaly is a serious chronic life shortening disease triggered by excess secretion of growth hormone (GH) by benign pituitary tumours. Oversupply of GH overstimulates liver, fat and kidney cells, through their GH receptors, to produce excess levels of Insulin-Like Growth Factor-I (IGF-I) in the blood manifesting in abnormal growth of the face, hands and feet, and enlargement of body organs including liver, kidney and heart. The primary treatments for acromegaly are to surgically remove the pituitary gland and/or drug therapy to normalize GH and serum IGF- I levels. In North America, Europe and Japan there are approximately 40,000 diagnosed acromegaly patients with about half requiring drug therapy. Drug treatment costs vary depending on dosage and frequency of administration ranging from A\$14,000-\$33,000 per patient per year

About Diabetic Retinopathy and Age Related Macular Degeneration (AMD)

Diabetic retinopathy and wet age-related macular degeneration (AMD) are two of the leading causes of vision loss. Over 5 million Americans aged 18 and older are affected by diabetic retinopathy. Around 12,000-24,000 patients with diabetic retinopathy lose their eyesight

each year in the US alone. These conditions are caused by new blood vessel formation in the retina or macula (the central part of the retina). In diabetes, high blood glucose can cause oxygen deprivation, which can stimulate factors that induce additional blood vessels in the retina. In AMD similar factors are thought to stimulate blood vessel production in the macula. These new blood vessels may break and bleed into the eye leading to scarring within the eye. Whilst there are drugs to control diabetes, patients with Type I diabetes who have had their disease for more than 10 years have a 90% chance of developing retinopathy, and about 20% of patients with Type II diabetes will get the disease. Surgical ablative treatments such as photocoagulation (laser therapy) are available but are not completely effective, may cause partial vision loss, and can only be used a limited number of times.

About Antisense Therapeutics Limited

Antisense Therapeutics Limited (ASX: ANP) is an Australian publicly listed biopharmaceutical drug discovery and development company. ANP's mission is to create, develop and commercialise novel antisense pharmaceuticals for large unmet markets. Its two most advanced projects target Multiple Sclerosis (ATL1102), and Psoriasis (ATL1101).

ANP plans to commercialise its pipeline via licensing/collaboration agreements with major biotechnology and pharmaceutical companies.

ANP's major shareholders include Circadian Technologies Limited (ASX: CIR), Isis Pharmaceuticals Inc (NASDAQ: ISIS), Queensland Investment Corporation and the Murdoch Childrens Research Institute.

Contact Information:

Website: www.antisense.com.au

Managing Director – Mark Diamond +61 3 9827 8999

Company Secretary – Natalie Korchev +61 3 9827 8999