ATL/TV1102 Trial Results Presented at World Congress on Treatment and Research in Multiple Sclerosis

September 22, 2008

- Conference call webcast Monday, 5:00 p.m. EDT and Tuesday, 7:00 a.m. Australian EST at http://www.antisense.com.au and http://www.isispharm.com

MELBOURNE, Australia and CARLSBAD, Calif., Sept. 22 /PRNewswire-FirstCall/ -- Antisense Therapeutics Ltd. (ASX: ANP) and Isis Pharmaceuticals, Inc. (Nasdaq: ISIS) are pleased to advise that the results from the ATL/TV1102 Phase IIa clinical trial in patients with multiple sclerosis (MS) were presented Saturday at the World Congress on Treatment and Research in Multiple Sclerosis in Montreal, Canada by the Principal Investigator for the trial, Volker Limmroth, M.D., Ph.D., Chairman of the Department of Neurology, Cologne City Hospitals, Germany.

As previously reported, ATL/TV1102 significantly reduced disease activity in patients with Relapsing Remitting Multiple Sclerosis (RRMS) in a randomized, double-blind, placebo-controlled Phase II study designed to obtain evidence of ATL/TV1102's effectiveness in reducing MS-related brain lesions as detected by magnetic resonance images (MRI). The study met its primary endpoint showing a significant reduction by 54.4% (p=0.01) in cumulative number of new active lesions in the ATL/TV1102 treated patients compared to placebo. Further details on the study design and outcomes are provided in the conference abstract which follows this document.

Dr. Limmroth said, "As VLA-4 is a clinically validated target in MS, there is high interest in the potential application of treatment modalities directed against this target. In our study we were able to demonstrate, for the first time, that a second-generation antisense drug designed to specifically inhibit the production of VLA-4 could significantly reduce disease activity in RRMS patients as early as 8 weeks. The level of efficacy achieved by ATL/TV1102 is very promising particularly when considering the short duration of dosing within the trial. As an antisense drug ATL/TV1102 will have a different, potentially preferable, safety profile to other drugs that target VLA-4 and therefore presents an exciting future treatment option for RRMS patients."

Mark Diamond, Chief Executive Officer of Antisense Therapeutics, said, "We are delighted to have our ATL/TV1102 Phase IIa trial results presented at such an important scientific meeting on MS. The development of ATL/TV1102 as an MS treatment continues with our partner Teva Pharmaceutical Industries (Teva) and we look forward to the prospect of Teva reporting on ATL/TV1102's future clinical progress. Importantly, the demonstration of significant disease activity with ATL/TV1102 in MS points to the potential of ATL/TV1102 in other disease settings such as autoimmune, inflammation and cancer. It also provides important validation for the application of second-generation antisense drugs outside of cardiovascular and metabolic diseases such as high cholesterol and diabetes where there has been success to date. We believe our results provide important substantiation for the broader clinical application of the second-generation technology."

"We are very encouraged by the data. Not only do they represent promising results for patients with MS, but they also evidence the significant progress we are making in demonstrating the effectiveness, efficiency and the breadth of opportunity of our antisense platform. It's another disease and another tissue where we have great proof-of-concept for antisense drugs," said Stanley Crooke, M.D., Ph.D., Chairman and Chief Executive Officer of Isis. "ATL/TV1102 and ATL's strategic relationship with Teva to move the drug forward further validates our business strategy. ATL has successfully moved the drug forward and now has established a very experienced partner to complete development and commercialization of the drug. This strategy benefits patients as well as Isis' pipeline, platform and balance sheet."

The presentation has been webcasted and will be available on http://www.msmontreal.org/home/default_e.asp in the coming weeks. The Company will provide login details on its website http://www.antisense.com.au once these are confirmed.

Conference abstract follows:

VLA-4 Antisense - An Oligonucleotide targeting VLA-4 mRNA (ATL1102) significantly reduces new active lesions in patients with RR-MS

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Background: Antisense oligonucleotides (ASOs) are an innovative new class of drugs that inhibit the expression of proteins by sequence-specific binding to the protein's mRNA. ATL1102 is a 2nd generation antisense inhibitor of CD49d, a subunit of Very Late Antigen 4 (VLA-4) which plays a key role in cell adhesion to vessel walls. VLA-4 blockade, as shown by monoclonal antibodies such as natalizumab, prevents activated lymphocytes from migrating into the CNS and significantly reduces disease activity in MS.

Objective: To evaluate VLA-4 Antisense (ATL1102) in the treatment of RR-MS

Methods: Randomized, double-blind, placebo-controlled multicenter Phase-IIa trial. 77 patients with RR-MS were treated for 8 weeks with either 200mg of ATL1102 or placebo subcutaneously twice weekly and evaluated for 16 weeks. MRI scans were performed at screening, and then monthly over 16 weeks. Primary efficacy variable: cumulative number of new active lesions (CNNAL; new gadolinium-enhancing T1 lesions (T1-Gd), new or enlarging T2 lesions) on MRIs taken at weeks 4, 8 and 12. Secondary efficacy variable: cumulative volume of T1-Gd lesions (CVT1L) on MRIs taken at weeks 4, 8 and 12.

Results: ITT population: 74 patients with a valid baseline MRI and at least one post-baseline MRI scan after first injection of study medication (n=39 placebo, n=35 ATL1102). ATL1102 showed a significant reduction, 54.4%, in CNNAL (6.2 placebo, 3.0 ATL1102; p=0.01). A reduction of 66.7% (p=0.002) was observed in the cumulative number (weeks 4,8,12) of new T1-Gd lesions with ATL1102. A reduction in CVT1L was also observed under ATL1102 but did not reach significance (589.4 mm3 placebo, 358.0 mm3 ATL1102; p=0.1068). Adverse events that were more frequent under ATL1102 included mild to moderate injection site reactions and a tendency for decreased platelet counts which were reversible after treatment interruption.

Conclusions: This proof-of-concept study of a drug designed to inhibit VLA-4 mRNA showed a significant reduction of the cumulative number of new active lesions in RR-MS patients following 8 weeks of treatment. These promising results warrant further investigation.

Background Information

ATL/TV1102 Phase IIa trial is a randomised, double-blind, placebo-controlled clinical trial of ATL/TV1102. Patients received either ATL/TV1102 or placebo injections over 8 weeks, and were monitored with monthly MRI (magnetic resonance imaging) brain scans during treatment, and for the 8 weeks following treatment. 77 patients were enrolled in the trial, which was conducted at multiple trial sites across six European countries.

Multiple sclerosis is a lifelong chronic disease of the central nervous system which is believed to affect as many as 2.5 million people worldwide. Global drug sales for MS are in excess of $US 6 billion and are expected to grow with the introduction of novel treatment options. There remains a high demand for more effective and better tolerated treatments.

About ATL/TV1102 for MS: ATL/TV1102 is an antisense drug discovered by Isis Pharmaceuticals, Inc. and licensed to ANP. Antisense drugs specifically block disease-causing proteins from being produced by interacting with their intended target based on information in the genetic code. ATL/TV1102 is a second-generation antisense inhibitor of CD49d, a subunit of VLA-4 (Very Late Antigen-4). In inflammation, white blood cells (leukocytes) move out of the bloodstream into the inflamed tissue, for example, the CNS in MS, and the lung airways in asthma. The inhibition of VLA-4 may prevent white blood cells from entering sites of inflammation, thereby halting progression of the disease. VLA-4 is a clinically validated target in the treatment of MS. Antisense inhibition of VLA-4 has demonstrated positive effects in a number of animal models of inflammatory disease including MS (Myers et al. J Neuroimmunol 160, p12-24, 2005).

About Antisense Therapeutics Limited: Antisense Therapeutics Limited (ASX: ANP) is an Australian publicly listed biopharmaceutical drug discovery and development company. Its mission is to create, develop and commercialize antisense pharmaceuticals for large unmet markets. ANP has two drugs in development and two drugs in pre-clinical research. ATL/TV1102 (injection) has completed a Phase IIa trial as a potential treatment of multiple sclerosis. ATL1103 is a second-generation antisense drug designed to lower blood IGF-I levels and is entering pre-clinical development as a potential treatment for acromegaly and vision disorders. ATL/TV1102 (inhaled) is at the pre-clinical research stage as a potential treatment for asthma. ATL1101 is a second-generation antisense drug at the pre-clinical research stage being investigated as a potential treatment for prostate cancer. ATL/TV1102 has been licensed to Teva Pharmaceutical Industries Ltd.

About Isis Pharmaceuticals, Inc.

Isis is exploiting its expertise in RNA to discover and develop novel drugs for its product pipeline and for its partners. The Company has successfully commercialized the world's first antisense drug and has 19 drugs in development. Isis' drug development programs are focused on treating cardiovascular and metabolic diseases. Isis' partners are developing antisense drugs invented by Isis to treat a wide variety of diseases. Ibis Biosciences, Inc., Isis' majority-owned subsidiary, is developing and commercializing the Ibis T5000(TM) Biosensor System, a revolutionary system to identify infectious organisms. Isis is a joint owner of Regulus Therapeutics LLC, a joint venture focused on the discovery, development and commercialization of microRNA therapeutics. As an innovator in RNA-based drug discovery and development, Isis is the owner or exclusive licensee of over 1,500 issued patents worldwide. Additional information about Isis is available at http://www.isispharm.com.

Isis Forward-Looking Statement

This press release includes forward-looking statements regarding Isis' business, its drug discovery and development pipeline, and the therapeutic potential of ATL/TV1102 for the treatment of multiple sclerosis. Any statement describing Isis' goals, expectations, financial or other projections, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement, including those statements that are described as Isis' goals. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics, and in the endeavor of building a business around such products. Isis' forward-looking statements also involve assumptions that, if they never materialize or prove correct, could cause its results to differ materially from those expressed or implied by such forward-looking statements. Although Isis' forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Isis. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Isis' programs are described in additional detail in Isis' annual report on Form 10-K for the year ended December 31, 2007, and its most recent quarterly report on Form 10-Q, which are on file with the SEC. Copies of these and other documents are available from Isis.

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