ASX Announcement

30 September 2021

Positive feedback received on Paediatric Investigation Plan

- **Positive feedback on PIP received subject to confirmation at October meeting**
- **Leading International CRO appointed**
- **Site evaluation assessment and documentation preparation for the clinical trial applications are underway**

Antisense Therapeutics Limited [ASX: ANP | US OTC: ATHJY | FSE: AWY] today announced that it has received a draft opinion recommending the agreement with its Paediatric Investigation Plan (PIP) for the development of ATL1102 for Duchenne muscular dystrophy (DMD) from the Paediatric Committee (PDCO) of the European Medicines Agency (EMA).

The draft opinion advises that '*The Paediatric Development Committee, having assessed the proposed paediatric investigation plan in accordance with Article 17 of Regulation (EC) No 1901/2006 as amended recommends as set out in the appended summary report to agree the paediatric investigation plan in accordance with Article 17(1) of said Regulation*'. The measures and timelines of the paediatric investigation plan recommended for agreement are set out in the draft opinion. The draft opinion is currently under review before discussion and adoption by PDCO during their forthcoming meeting on 15 October 2021 with the Company requested to provide feedback including checking the document for any inaccuracies ahead of the meeting. The opinion is draft and may not reflect the adopted PDCO opinion. ANP is not aware of any material issues that would adversely impact PCDO's adoption of the above draft opinion. The draft opinion appears entirely consistent with the Company's plans for the conduct of the Phase IIb trial. Once adopted the PDCO opinion and EMA decision will be transmitted to the Company shortly thereafter.

A paediatric investigation plan is a development plan aimed at ensuring that the necessary data is obtained through studies in children. Approval of the PIP is required to support the authorisation of a medicine for children in the European Union (EU). The PIP addresses the entire paediatric development program for ATL1102 in DMD (including future ambulant DMD patient studies). ANP through its interactions with PDCO, is looking to ensure that its planned clinical studies including its Phase IIb clinical trial of ATL1102 in non-ambulant DMD boys, will be run in accordance with PDCO expectations for future product approval.

Further details on the Phase IIb trial design including the expected timing for trial application and approval for the Phase IIb trial of ATL1102 in non-ambulant DMD patients to be conducted in Europe will be communicated to the market once the final opinion is received from PDCO following their 15 October 2021 meeting.

The Company continues to advance its preparations for its planned Phase IIb clinical trial in Europe and has selected global Clinical Research Organisation Parexel to conduct the study. https://www.parexel.com/

The work program has commenced and Parexel is currently conducting site evaluations to select the sites (>30) to take part in the Phase IIb study, which will recruit patients into the European trial once requisite trial application approvals are received for each jurisdiction.

Nuket Desem, Director, Clinical and Regulatory Affairs at Antisense Therapeutics said: "Receipt of the EMA's PDCO positive feedback on the PIP is another key step forward in advancing the Company's plans for the conduct of the potentially approvable Phase IIb study of ATL1102 in DMD in Europe, in line with the Company's expectations. With the final opinion due in the coming weeks, we are finalising the site evaluations and selections for the conduct of the trial and progressing preparations of the clinical trial applications for submission to the national competent authorities."

This announcement has been authorised for release by the Board.

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About Antisense Therapeutics Limited [ASX: ANP | US OTC: ATHJY | FSE: AWY] is an Australian publicly listed biotechnology company, developing and commercializing antisense pharmaceuticals for large unmet markets in rare diseases. The products are in-licensed from Ionis Pharmaceuticals Inc. (NASDAQ: IONS), an established leader in antisense drug development. The Company is developing ATL1102, an antisense inhibitor of the CD49d receptor, for Duchenne muscular dystrophy (DMD) patients and recently reported highly promising Phase II trial results. ATL1102 has also successfully completed a Phase II efficacy and safety trial, significantly reducing the number of brain lesions in patients with relapsing-remitting multiple sclerosis (RRMS). The Company has a second drug, ATL1103 designed to block GHr production that successfully reduced blood IGF-I levels in Phase II clinical trials in patients with the growth disorder acromegaly.

About ATL1102 ATL1102 is an antisense inhibitor of CD49d, a subunit of VLA-4 (Very Late Antigen-4). Antisense inhibition of VLA-4 expression has demonstrated activity in a number of animal models of inflammatory disease including asthma and MS with the MS animal data having been published in a peer reviewed scientific journal. ATL1102 was shown to be highly effective in reducing MS lesions in a Phase IIa clinical trial in patients with RR-MS. The ATL1102 Phase IIa clinical data has been published in the medical Journal ***Neurology*** (Limmroth, V. et al Neurology, 2014; 83(20): 1780-1788).

About DMD Duchenne Muscular Dystrophy (DMD) is an X-linked disease that affects 1 in 3600 to 6000 live male births (Bushby *et al*, 2010). DMD occurs as a result of mutations in the dystrophin gene which causes a substantial reduction in or absence of the dystrophin protein. Children with DMD have dystrophin deficient muscles and are susceptible to contraction induced injury to muscle that triggers the immune system which exacerbates muscle damage as summarized in a publication co-authored by the Director of the FDA CDER (Rosenberg et al, 2015). Ongoing deterioration in muscle strength affects lower limbs leading to impaired mobility, and also affects upper limbs, leading to further loss of function and self-care ability. The need for wheelchair use can occur in early teenage years for patients on corticosteroids with a mean age of 13, with respiratory, cardiac, cognitive dysfunction also emerging. Patients with a greater number of immune T cells expressing high levels of CD49d have more severe and progressive disease and are non-ambulant by the age of 10 despite being on corticosteroid treatment (Pinto Mariz et al, 2015). With no intervention, the mean age of life is approximately 19 years. The management of the inflammation associated with DMD is currently addressed via the use of corticosteroids, however they are acknowledged as providing insufficient efficacy and are associated with significant side effects. As a consequence, there is an acknowledged high need for new therapeutic approaches for the treatment of inflammation associated with DMD.

Rosenberg AS, Puig M, Nagaraju K, *et al*. Immune-mediated pathology in Duchenne muscular dystrophy. *Sci Transl Med* 2015, 7: 299rv4.
Bushby et al for the DMD Care Consideration Working Group/ *Diagnosis and management of Duchenne muscular dystrophy, part 1* Lancet Neurol. **2010** Jan;9(1):77-93 *and part 2* Lancet Neurol. **2010** Feb;9(2):177-89 .
Pinto-Mariz F, Carvalho LR, Araújo AQC, *et al*. CD49d is a disease progression biomarker and a potential target for immunotherapy in Duchenne muscular dystrophy. *Skeletal Muscle* 2015, 5: 45-55.