

Antisense Therapeutics Ltd

AGM Presentation and Questions on notice

November, 2016

Forward Looking Statements

This presentation contains forward-looking statements regarding the Company's business and the therapeutic and commercial potential of its technologies and products in development. Any statement describing the Company's goals, expectations, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those risks or uncertainties inherent in the process of developing technology and in the process of discovering, developing and commercializing drugs that can be proven to be safe and effective for use as human therapeutics, and in the endeavor of building a business around such products and services. Actual results could differ materially from those discussed in this presentation. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in the Antisense Therapeutics Limited Annual Report for the year ended 30 June 2016, copies of which are available from the Company or at www.antisense.com.au.



Corporate Overview

KEY FINANCIALS	
Market Capitalisation	A$6.7M
Cash as at September 2016	A$3.9M
Ordinary shares on issue (pre cancelation of Strongbridge holding)	176M
Share price	$0.038

Capital Management

- *8.5% reduction of the issued capital via cancellation of Strongbridge holding*
- *Facility for sale of less than marketable parcels*
- *Bonus and New Option issue*

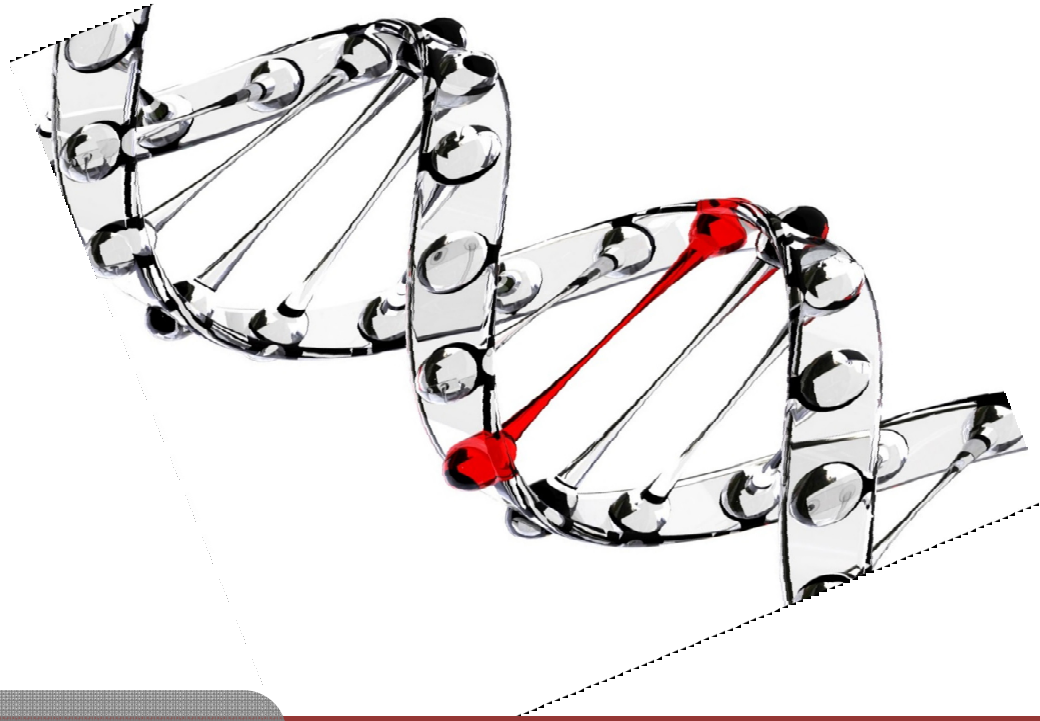
Mr Robert W Moses Independent Non-Executive Chairman	Formerly Corporate Vice President of CSL Limited. Mr. Moses draws on more than 40 years' experience in the pharmaceutical/biotechnology industry.
Mr Mark Diamond Managing Director & Chief Executive Officer	Over 26 years' experience in the pharmaceutical and biotechnology industry. Formerly Director, Project Planning/Business Development at Faulding Pharmaceuticals in the USA, in-licensing within Faulding's European operation and International Business Development Manager in Australia.
Dr Graham Mitchell Independent Non-Executive Director	Joint Chief Scientist for the Victorian Government Department of Environment and Primary Industries. Formerly Director of Research in the R&D Division of CSL Limited.
Dr Gary Pace Independent Non-Executive Director	Dr Pace has more than 40 years' international experience in the development and commercialization in biotechnology/pharmaceuticals industries. Long-term board level experience with both multi-billion and small cap companies.
Mr William Goolsbee Independent Non-Executive Director	Founder, Chairman and CEO of Horizon Medical Inc. 1987 – 2002 until acquisition by UBS Private Equity. Founding Director then Chairman of ImmunoTherapy Corporation until acquisition by AVI Biopharma, Inc. (now Sarepta Therapeutics). Former Chairman of privately held BMG Pharma LLC and Metrodora Therapeutics.

Antisense Therapeutics Ltd

- ✓ Advanced stage drug pipeline - 2 compounds with positive Phase II clinical results
- ✓ ATL1103 for acromegaly
  - *Phase II trial in acromegaly patients met primary endpoint with significant (p<0.0001) reduction in sIGF-I*
  - *Successful completed higher dose study in acromegaly patients*
  - *In confidential discussions with potential pharmaceutical development partners*
- ✓ ATL1102 for multiple sclerosis
  - *Phase II trial in Relapsing Remitting-MS patients met primary end point with significant (p=0.01) reduction in the cumulative number of new active brain lesions compared to placebo*
  - *Drug significantly reduced B cell numbers - B cell targeting drugs have shown clinical benefit in relapsing and progressive forms MS*
  - *ANP to submit a US IND application in early 2017 for Phase IIb human trial*

Recent Key Outcomes

- Settlement reached with previous ATL1103 licensing partner
  - *Total value received over 12 month partnership approximately $10 million (in the form of fees, manufactured drug product, toxicological testing and payment of costs in relation to higher dose study)*
  - *8.5% reduction of the issued capital via cancellation of Strongbridge holding*
- US and European Orphan Drug Designation granted for ATL1103
- Successfully completed ATL1103 Higher Dose study
- Completed manufacture of clinical supplies of ATL1102 for its further clinical development
- Submitted application to the National Multiple Sclerosis Society in the US for grant funding to conduct clinical study in Germany in SP-MS patients
- As part of new strategy, an intensified effort to access value adding new development pipeline opportunities to expand and leverage current business
  - *Projects that…resonate with global capital markets to complement the Company's existing product pipeline*
  - *Progressing executable opportunities*

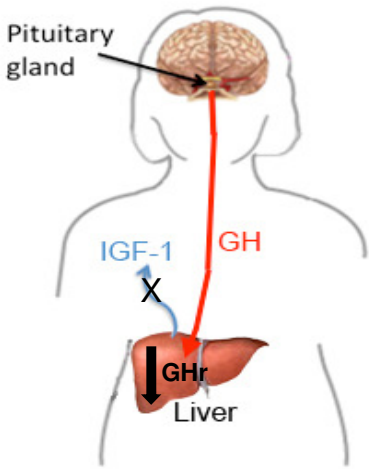


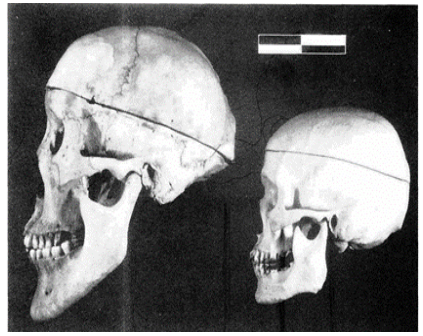
ATL1103
Acromegaly

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ATL1103 for Acromegaly

- Acromegaly - abnormal enlargement of organs and bones of the face, feet and hands due to a benign tumor of the pituitary gland, causes excess Growth Hormone and Insulin-like Growth Factor 1 (sIGF-I) and leads to diabetes, hypertension and cancer
- Current first line therapies for patients failing surgical treatments are effective in 45-70% of cases only (Global Sales ~ $1B/annum) with only 1 second line therapy drug Somavert® (Global Sales >$200M/annum) estimated to be capturing just 25% of market due to high cost and poor patient compliance
- ATL1103 reduces expression of Growth Hormone receptor (GHr) in the liver & blocks GH action on the liver, which reduces sIGF-I
- Normalising sIGF-I is the treatment goal in acromegaly
- **ATL1103 has suppressed sIGF-I in all animal and human studies undertaken to date**
- ATL1103 potential advantages include lower cost of therapy, improved safety profile, and more convenient dosing and administration





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Project Status: ATL1103 for Acromegaly

- Phase II trial
  - Primary Efficacy Endpoint Met with significant ($p<0.0001$) reduction in sIGF-I
- Higher dose study
  - *3 patients were dosed for 13 weeks, with one patient at the request of the Principal Investigator receiving an extended dosing period of an additional 12 weeks*
  - *All 3 patients received a therapeutic benefit from the drug with 2 of 3 patients achieving the goal of sIGF-I normalisation at completion of their respective dosing periods*
- Certain toxicology studies to support longer term clinical trials initiated by former partner completed or nearing completion
- ANP is eligible to apply for development grants for continued clinical development of ATL1103 made available by US and European authorities as a result of ATL1103 being granted Orphan Drug designation
- ANP is in confidential discussions with potential pharmaceutical partners

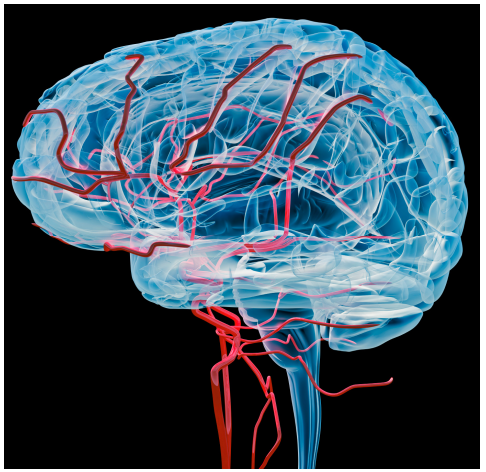


ATL1102
Multiple Sclerosis

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ATL1102 for Multiple Sclerosis

- **Multiple Sclerosis** (MS) is a chronic, progressive, and debilitating autoimmune disease that affects central nervous system, brain and spinal cord
- Affects approx 400,000 people in North America and more than 2.5 million worldwide. Global sales for MS drugs in 2015 were US$20 Billion
- ATL1102 is an antisense inhibitor of VLA-4 protein, a clinically validated target in MS.
- Successful Phase II trial completed in patients with Relapsing Remitting-MS
  - *Met primary end point after only two months of dosing reducing the cumulative number of new active brain lesions by 54.4% (p=0.01) compared to placebo*
- US and EU patents granted to 2029 in RR-MS and progressive forms of MS potentially extendible up to 5 years
- **Phase II data comparable/superior to best in class drugs at same stage of development, with potential for superior administration and safety profile**



Project Status: ATL1102 for MS

- Engaged in process to attract a pharmaceutical company partner to undertake Phase IIb
- To further support the commercialisation process and continue to add value to the program, ANP intends to submit a US IND application in early 2017 for longer duration Phase IIb human trials of ATL1102
- With the assistance of consulting firm FreeMind, ANP anticipates making an application after IND clearance for an award grant of the type and size (>US$10 million) that would fund the conduct of the Phase IIb trial
- ANP is proposing to undertake a small (est. 12 patients) investigative study of ATL1102 in relapsing SP-MS patients in Germany with Professor Volker Limmroth
  - *An application has been submitted for grant funding to conduct this study*
  - *If successful could allow for a potential study start in early Q2'17*
  - *Early Access Program in Europe expected to be initiated on the back of positive data from this study which could be available later in 2017*
  - *Clinical supplies of ATL1102 available for potential use in study and EAP*

ANP core attributes

- Experience and success in taking development programs from discovery through to successful Phase 2 completion in a cost- and time-effective manner
- Antisense/nucleotide preclinical and clinical development success
  - *ATL1103 (Phase 2), ATL1102 (Phase 2b planned), ATL1101 (animal PoC)*
- Autoimmune, endocrinology, oncology, CNS, rare diseases focus and expertise
  - *Established KOL, consultant and contractor networks*
- Commercialisation achievements:
  - *Successfully set up and managed in-licensing/technology collaboration with Ionis Pharmaceuticals*
  - *Executed 2 major clinical stage out licensing deals with international companies*
  - *Estimate that ANP have received to date approx. $20 million from partners in licensing fees and development support*
  - *ANP retains all worldwide rights to develop and commercialise ATL1102 & ATL1103*

New Growth Opportunities to Complement Existing Product Pipeline



- Develop initial screening criteria
- Establish deal flow that aligns with Antisense business
- DD team to review opportunities
  - *Technical (scientific/manufacturing), commercial, operational, finance, legal assessments*
- Negotiations and recommendations
  - *Transaction structure*
- Board approval
- Announcement to the market
- Implementation and integration of opportunity into Antisense

New Growth Opportunities: Criteria

- Antisense, RNAi (no diagnostics or devices)
- Strong IP position
- Attractive worldwide market opportunity with sophisticated healthcare investor interest
- Therapeutic area with unmet medical need
  - *Neuro-inflammatory, autoimmune, endocrinology, oncology preference*
- Strong competitive position
- New preclinical compounds and advancement of existing compounds into new clinical applications

Corporate Summary

- RNA-based technologies continuing to see investor and Big Pharma interest
- Developing a highly validated and commercially attractive technology
- Progressing two clinically advanced development programs
- Looking to add new growth opportunities to complement existing product pipeline



Antisense Therapeutics

Mark Diamond, CEO

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APPENDIX

AGM questions on notice received on 8th November 2016

1. *The company expects an IND clearance for a Phase 11B trial of ATL1102 would enhance its commercialization efforts. We were given the go ahead to move forward and submit an IND back in October 2014 why has the company not moved forward on this earlier especially as by your own admittance, you the board believe it would enhance its commercialization efforts.*

The Company's focus has been on partnering ATL1102 for its continued development in MS. The next stage of development (Phase IIb) will require in the order of A$20 million to conduct which is beyond the Company's financial capacity on its own. Recently it was announced that we have now identified, via our consultants FreeMind, a potential non-dilutive grant funding opportunity. The grant requires an IND approval and so we are looking to submit an IND in the new year with the prospect that we will be successful with the grant. The IND may also help our partnering efforts. In the period between the pre-IND and the intended IND filing we have also received critical corporate and KoL feedback on the trial design for the Phase IIb which has been incorporated into the new Phase IIb protocol (and different to the trial designs submitted as part of the pre-IND process) which we expect to be more attractive to potential partners and/or grant bodies.

2. *IF we are pushing forwards into a Ph2b study, one can only assume by previous ANN that this phase 2B study will be set up for patients with both SPMS and RRMS. If this is the case then WHY has the EAP for RRMS not taken place as previously planned, could the EAP for SPMS not be added to, once the trial had taken place, after all if the so called mini trial comes out negative, are you not putting the whole EAP under threat if this is the outcome, when in actual fact had the company have moved forward as planned we could possibly have been showing positive interim results from an EAP for RRMS by the time the EAP gets underway for SPMS, the way the company are moving forwards on this SPMS is unknown territory for ATL 1102 and could put our whole MS program in jeopardy imagine what a negative result would mean @ market for ANP and the whole pipeline*

EAP legislation requires the continued clinical development of a drug towards eventual regulatory authority approval (Phase III/NDA). As previously stated by the Company, most of the recent partnering interest in ATL1102 has been for its potential application in Secondary progressive MS. The Phase IIb trial design potentially allows for a future Phase III study to be conducted in either RR-MS or SP-MS, however based on feedback, it appears the most likely path forward would be SP-MS. We cannot, however, move forward with an EAP in RR-MS in the knowledge that the drug may not be developed and registered in this indication given the EAP legislative requirements noted above. We are also keen to preserve our existing clinical supplies of ATL1102 and to use them in activities that we believe will bring the most long term value. With this in mind we plan to utilize these supplies in the R-SP-MS study planned with Prof Limmroth in Germany where we will get clinical experience of the drug at the proposed lower clinical doses for longer duration (to assess the drug's safety and efficacy profile) in the patient population where there is greater commercial need. We feel this program is lower risk as drugs that have worked in RR-MS have also worked in R-SP-MS.

3. *It is Vaguely understood as nothing was ever announced that the previous samples that were supposedly going to be available for the EAP, had obviously gone by their use by date, hence the Ann to the market that a new batch had to be processed (what was the shelf life of the previous Batch) could it be that this latest batch that has been made up, will be totally unusable by the time that the EAP actually gets underway hence being a total waste of company funds?*

ATL1102, like other oligonucleotide drugs of its class, is inherently stable. The formulated ATL1102 drug product that was manufactured for the EAP has been assigned a provisional label expiry in 2018. However, as required by regulatory guidelines, both the API and formulated product remain under stability testing for the duration of its intended use and further reviews of the stability data as it becomes available is expected to justify additional extensions. Based on our experience with previous batches of ATL1102, the company is confident of an extension of 4 or more years from the date of manufacture to be justified for the current batch.

4. *On the 9/12/2014 the market was informed as follows. Both ANP and Destum are in going dialogue with potential pharmaceutical company partners. The process of attracting a suitable partner for ATL1102 is anticipated to take up to six months*
4 /11/2016 Antisense Therapeutics continues to interact with potential pharmaceutical partners regarding the ongoing development of ATL1102
Just over two years since you began trying to partner ATL1102 you come out with the same old statement.

The partnering process is often protracted and outside the direct control of the licensor. The financial commitment required to take ATL1102 through Phase IIb and Phase III in MS will require hundreds of millions of dollars, consequently the decision-making process for the partnering company is complex given the competitive environment and level of financial commitment required. In the period outlined, there have been a number of changes to the MS landscape which have required the Company to reconsider its positioning of ATL1102 for partnering. As per our recent ATL1102 for MS progress announcement, we remain of the belief that ATL1102 is an asset that should be attractive to potential pharmaceutical partners and the Company is doing all that it believes it can and is necessary to support such plans, however there can be no guarantees that a deal will be consummated. The Company will advise of any material progress should this arise, however the Company believes that providing further details on the partnering status could be detrimental to the partnering prospects and not in the commercial interests of the Company.

5. *What is happening with regards ATL1103 Are we still trying to partner the drug OR NOT an update would be most welcome as to the way the company are moving on this or are you going to sit on this like the IND for two more years before moving forwards?*

As highlighted in the AGM presentation, the Company is in confidential discussions with potential pharmaceutical partners and will advise of any material progress. As mentioned above, the Company believes that providing further details on the partnering status may be detrimental to the partnering prospects and not in the commercial interests of the Company.

6 *This board employed two new directors last year, why was one not brought onboard for his ability to deal with market specifics finance and investment and shareholder value something that this existing board have never been able to achieve, shareholder value, It would appear that this board have little to no regard for its investors large or small and the erosion of their shareholdings. (PLEASE EXPLAIN)*

The Company is very fortunate to have attracted its 2 US based directors who have a very deep understanding of the pharmaceutical development and commercialisation process at a global level. The Company continues to look at opportunities to refresh and strengthen the Board.

7. To make a comparison
in June 2014 IIL Innate had 172,479,822 shares and an sp of approx 16.5c
In September 2014 ANP had 144,096,128 shares and an sp of 17c
In October to date IIL have an Sp of 56c with a high of 74.5c
In October to date ANP have an SP of 3.8c and a low of 2.8c
Question
WHY are Innate sat on 56c today and ANP sat on 3.8c today

The Company can't comment on the specifics on trading in the shares of another company. Innate Therapeutics appear to have generated shareholder interest in their Phase IIb program in SP-MS patients, which the Company views as positive for its own prospects should it move forward with its planned Phase IIb in RR-MS and SP-MS patients. At the same time the Company is progressing other programs and initiatives to grow the company and create value for shareholders.