Leading Innovation in Pain & Inflammation

INVESTOR PRESENTATION

NOVEMBER 2019
Forward-Looking Statements

This presentation contains forward-looking information and statements which constitute “forward-looking information” under Canadian securities law and which may be material regarding, among other things, the Company’s beliefs, plans, objectives, estimates, intentions and expectations. Specific forward-looking information in this document includes, but is not limited to, statements with respect to the Company’s future operating and financial results, its research and development activities, its capital expenditure plans and the ability to execute on its future operating, investing and financing strategies. These forward-looking information and statements, by their nature, necessarily involve risks and uncertainties that could cause actual results to differ materially from those contemplated by these forward-looking statements. We consider the assumptions on which these forward-looking statements are based to be reasonable, but caution the reader that these assumptions regarding future events, many of which are beyond our control, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect us. Additional information regarding risk factors can be found in public disclosure records on SEDAR.

Our statements of “belief” in respect of our product and partner product candidates are based primarily upon our results derived to date from our research and development program. We believe that we have a reasonable scientific basis upon which we have made such statements. It is not possible, however, to predict, based upon in vitro and animal studies whether a new therapeutic agent or technology will be proved to be safe and/or effective in humans. We cannot assure that the particular results expected by us will occur.

Any forward-looking statements and statements of “belief” represent our estimates only and should not be relied upon as representing our estimates as of any subsequent date. Except as required by law, we do not assume any obligation to update any forward looking statements or statements of “belief”. We disclaim any intention or obligation to update or revise any forward-looking statements or statements of “belief”, whether as a result of new information, future events or otherwise. Nothing herein should be construed as an Offering of securities of the Company in any jurisdictions.
Antibe is on the verge of solving one of the most pervasive medical problems of our time.
Nonsteroidal anti-inflammatory drugs ("NSAIDs") are among the most widely used medications in the world, yet they are associated with severe gastrointestinal ("GI") ulceration and bleeding.

1) Global sales in 2014 (Evaluate Pharma).
NSAIDs Have a Blockbuster Pedigree

Of the sixteen drugs which hit $1 billion in sales in their first year, two were designed to address the GI-toxicity issue with NSAIDs.

<table>
<thead>
<tr>
<th>Product</th>
<th>Company</th>
<th>Therapeutic Category</th>
<th>US Sales in First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harvoni</td>
<td>Gilead</td>
<td>Hep C Antiviral</td>
<td>$10.6B</td>
</tr>
<tr>
<td>Sovaldi</td>
<td>Gilead</td>
<td>Hep C Antiviral</td>
<td>$9.0B</td>
</tr>
<tr>
<td>Epclusa</td>
<td>Gilead</td>
<td>Hep C Antiviral</td>
<td>$3.2</td>
</tr>
<tr>
<td>Celebrex</td>
<td>Pharmacia</td>
<td>NSAID</td>
<td>$2.3B</td>
</tr>
<tr>
<td>Olysio</td>
<td>J&amp;J</td>
<td>Hep C Antiviral</td>
<td>$2.1B</td>
</tr>
<tr>
<td>Tecfidera</td>
<td>Biogen</td>
<td>MS</td>
<td>$1.8B</td>
</tr>
<tr>
<td>Incivek</td>
<td>Vertex</td>
<td>Hep C Antiviral</td>
<td>$1.7B</td>
</tr>
<tr>
<td>Ocrevus</td>
<td>Roche</td>
<td>MS</td>
<td>$1.7B</td>
</tr>
<tr>
<td>Lipitor</td>
<td>Pfizer</td>
<td>Statin</td>
<td>$1.5B</td>
</tr>
<tr>
<td>Vioxx</td>
<td>Merck &amp; Co</td>
<td>NSAID</td>
<td>$1.5B</td>
</tr>
</tbody>
</table>

Source: Evaluate Pharma (top ten shown).
ATB-346 was designed to deliver both GI and cardiovascular safety with *non-addictive* pain relief.

Addressing an Unmet Need…

Better CV Safety

- ATB-346
- The Need

Better GI Safety

- Naproxen
- Non-selective NSAIDs
- Celebrex
- Bextra
- Meloxicam
- Vioxx

Schematic for illustrative purposes – not to scale

ATB-346:
Lead Drug
Our Lead Drug: ATB-346

- Novel anti-inflammatory drug that releases hydrogen sulfide ("H₂S")
- Negligible GI damage: greatly superior to existing NSAIDs
- No significant effect on blood pressure, unlike existing NSAIDs
- Global IP and exclusivity with market protection in US to ~2031 (EU to 2033)
  - Patents granted in major markets (including US, Europe, Japan, China & Canada)
Hydrogen sulfide (“H₂S”) has become recognized as a crucial signalling molecule with a wide range of anti-inflammatory and cytoprotective functions.

H₂S Prevents NSAID-Induced Injury

- H₂S physiological activities reduce inflammation in the gastrointestinal ("GI") tract and prevent NSAID-induced injury

Strong Phase 2B GI Safety Data

- A successful Phase 2B double blind GI safety study for ATB-346 was completed in March 2018 in 244 healthy volunteers
- **Validation of GI safety superiority:** ATB-346 exhibited an ulceration rate of 2.5% versus 42.1% for naproxen over the two-week treatment period (p<0.0001)
- ATB-346 was safe and well-tolerated

![Gastric ulcer incidence of ATB-346 (>=3mm diameter) versus naproxen during two-week treatment period](chart.png)
Strong Phase 2B GI Safety Data cont’d

• Strong secondary endpoint data

• Gastroduodenal ulcers and erosions
  - Total number of ulcers ≥3 mm: 4 for ATB-346 vs 210 for naproxen
  - Large ≥5 mm ulcer incidence: 0% for ATB-346 vs 24% for naproxen
  - Mean erosions per subject: 1.7 for ATB-346 vs 12.7 for naproxen

• Non-GI secondary endpoints and overall safety
  - Thromboxane (TXB2) inhibition for ATB-346 was not statistically different than naproxen
  - No blood pressure increases for ATB-346
  - Safe and well tolerated: overall very low incidence of adverse events for ATB-346
Final Phase 2 Study Underway

- Phase 2B dose-ranging, efficacy study for ATB-346 designed to validate efficacy in reducing pain and establish the Phase 3 dose
- 360 osteoarthritis patients are being randomized to either placebo or one of three doses of ATB-346 (150 mg, 200 mg or 250 mg) once daily
- A total of 40 clinical sites — the largest number of sites for any clinical trial ever conducted in Canada
- Top-line data expected in calendar Q1 2020

Earlier Phase 2A Efficacy Study Results
(completed in August 2016)

Change of Pain Severity in OA patients treated once daily with 250 mg of ATB-346

Average pain reduction with celecoxib or naproxen (twice daily).1,2

Current Phase 2B study is looking to replicate the success of the Phase 2A efficacy study completed in 2016.

References:
H2S Platform:
Other Pipeline Drugs
ATB-352: Addressing the Opioid Crisis...

• Antibe has commenced IND-enabling pre-clinical studies for ATB-352, a potent and non-addictive analgesic for severe pain to address the global opioid crisis.

• Post-operative pain has been identified as the lead indication, a US$9 billion market opportunity\(^1\).

> Every day, over 1,000 people are treated in emergency departments for misusing prescription opioids.

---

1) 2019 estimate based on US$5.9B 2010 estimate and 5.3% annual growth rate (BioPharm Insight)

2) Source: National Center on Health Statistics, CDC Wonder

---

*United States, including non-methadone synthetics (fentanyl)*

---

\(1\) US Department of Health and Human Services (2013)
ATB-352 causes negligible GI damage in rats compared to ketoprofen, a very strong NSAID prescribed for acute pain.

Source: Nitric Oxide 2014 159, 1236-1246. *rat study
ATB-340: A Drug for Everyone Over 50?

- Low-dose aspirin has been known for decades to provide a dramatic reduction in the risk of stroke and, more recently, a reduction in the risk of digestive system cancers.

- However, aspirin, like other NSAIDs, causes stomach ulcers and GI bleeding in an appreciable portion of the population which precludes its broad prescription by physicians.

- ATB-340 is a H₂S-releasing derivative of aspirin that has been shown to be GI-safe in pre-clinical studies.
Aspirin, but not ATB-340, causes significant gastric erosions in the rat stomach.

Citagenix: Commercial Asset in Regenerative Medicine
Regenerative medicine is growing globally at 30%+.

Citagenix: Poised for Global Growth…

- Our commercial subsidiary, Citagenix Inc. (“Citagenix”), is the market leader in Canada in dental regenerative medicine and is now growing considerably in the United States.

1. Annual run rate based on the six month period ended September 30, 2019
2. Source: Straumann 2016 Annual Report (page 53): assuming USD:CHF FX rate of 1.00 : 1.00

Global Market for Oral Tissue Regeneration

US$700 MILLION

Bone Graft Substitutes
Dental Barrier Membranes
High Quality Instruments

Citagenix has a $10M+ revenue base and has initiated a global growth strategy.

Regenerative medicine is growing globally at 30%+.

DynaBlast™ is a composite graft product that combines osteoinductive and osteoconductive elements in a proprietary, Demineralized bone matrix with cancellous bone.

Demineralized bone matrix putty

Reverse Phase Medium (RPM) for robust handling.

Accell Connexus is a high surface area demineralized bone matrix (ABM) that incorporates a highly biocompatible first generation demineralized bone matrix in a reverse phase medium for superior handling.

Applications

- Osseous defects
- Ridge augmentation
- Sinus lifts
- Extraction site repair
- Ridge preservation
- Sinus lift procedures
- Implant site development
- Extraction site repair
- Coronal defects around immediate implants
- Sinus lift procedures
- Implant site development
- Extraction site repair
- Periodontal defects
Corporate Information
Management & Board of Directors

Management

- Dan Legault  JD  
  CHIEF EXECUTIVE OFFICER
- John Wallace  PhD, MBA  
  CHIEF SCIENTIFIC OFFICER
- Alain Wilson  MBA  
  CHIEF FINANCIAL OFFICER
- David Vaughan  PhD  
  CHIEF DEVELOPMENT OFFICER
- Michael McMillan  
  CHIEF EXECUTIVE OFFICER / CITAGENIX INC.
- Scott Curtis  MEng, CFA  
  VP CORPORATE DEVELOPMENT

Board of Directors

- Walt Macnee  MBA  
  Chairman  
  VICE CHAIRMAN / MASTERCARD INC.
- Roderick Flower  PhD  
  EMERITUS PROFESSOR OF PHARMACOLOGY / WILLIAM HARVEY RESEARCH INSTITUTE (WHRI)
- Amal Khouri  MBA  
  VP, BUSINESS DEVELOPMENT / KNIGHT THERAPEUTICS INC.
- Dan Legault  JD  
  CHIEF EXECUTIVE OFFICER
- John Wallace  PhD, MBA  
  CHIEF SCIENTIFIC OFFICER
- Yung Wu  
  CHIEF EXECUTIVE OFFICER / MARS DISCOVERY DISTRICT
Our clinical and scientific advisory boards are comprised of world-class scientists, including a Nobel Laureate.

- **Dr. Andre Buret** PhD  
  CALGARY, ALBERTA
- **Dr. Francis Chan** MD, PhD  
  HONG KONG, CHINA
- **Dr. Giuseppe Cirino** PhD  
  NAPLES, ITALY
- **Dr. Peter B. Ernst** DVM, PhD  
  SAN DIEGO, CALIFORNIA
- **Dr. Derek Gilroy** PhD  
  LONDON, ENGLAND
- **Dr. Richard H. Hunt** MD  
  OXFORD, ENGLAND
- **Dr. Louis J. Ignarro** PhD  
  LOS ANGELES, CALIFORNIA
- **Dr. Angel Lanas** MD, DSc  
  ZARAGOZA, SPAIN
- **Dr. Gilberto de Nucci** MD, PhD  
  SAO PAOLO, BRAZIL
- **Dr. Daniel K. Podolsky** MD  
  DALLAS, TEXAS
- **Dr. James Scheiman** BS, MD  
  ANN ARBOR, MICHIGAN
- **Dr. William Sessa** PhD  
  NEW HAVEN, CONNECTICUT
- **Dr. Philip M. Sherman** MD  
  TORONTO, ONTARIO
- **Dr. J. Carter Thorne** MD, FRCP(C), FACP  
  NEWMARKET, ONTARIO
Partnering Advisory Team

• **Angus Russell**  CA  
  - Former CEO of Shire (2008 - 2013); led expansion into new therapeutic areas through a series of late-stage deals
  - Currently Chairman of Mallinckrodt, a leading global specialty pharma company

• **Dominique Monnet**  MBA  
  - Responsible for accelerating growth of Amgen’s Inflammation division and its Enbrel® franchise
  - Currently President of PDL BioPharma, a manager of healthcare companies, products and royalties

• **Andrew Powell**  JD  
  - Played instrumental role in the sale of: Medivation to Pfizer for US$14B; InterMune to Roche for US$8.3B; ImClone to Eli Lilly for US$6.5B
  - Currently a director at Aclaris Therapeutics, a biopharma company focused on dermatology

• **Rami Batal**  PhD, MBA  
  - Former VP, Business Development for Purdue Canada; brings to Antibe vast experience in the pain markets
  - Most recently headed the outreach and partnership efforts at Spectrum Therapeutics, a Canopy Growth subsidiary that focuses on cannabinoid therapeutics
## Capitalization Summary

<table>
<thead>
<tr>
<th>Stock Symbols</th>
<th>TSXV-ATE; OTCQB-ATBPF</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Share Price</strong></td>
<td>$0.435</td>
</tr>
<tr>
<td><strong>Shares Outstanding</strong></td>
<td>281M</td>
</tr>
<tr>
<td><strong>Stock Options &amp; RSUs</strong></td>
<td>42M</td>
</tr>
<tr>
<td><strong>Warrants</strong></td>
<td>41M</td>
</tr>
<tr>
<td><strong>Market Capitalization</strong></td>
<td>$122M</td>
</tr>
<tr>
<td><strong>Cash &amp; Equivalents</strong></td>
<td>$8M</td>
</tr>
<tr>
<td><strong>Insider Ownership</strong></td>
<td>FULLY DILUTED</td>
</tr>
<tr>
<td><strong>Annual Sales</strong></td>
<td>$10M</td>
</tr>
</tbody>
</table>

1) As of market close November 27, 2019  
2) As at the end of Q2/F20 reporting period (September 30, 2019)  
3) Annual run rate based on the six month period ended September 30, 2019
Key Takeaways

• **Best-in-class drug platform:** Antibe’s proprietary hydrogen sulfide (‘H₂S’) technology represents a major medical advance in the safe treatment of pain & inflammation

• **Strong Phase 2 proof-of-concept data:** Antibe’s lead drug, ATB-346, recently showed unequivocal superiority to naproxen in GI safety (2.5% versus 42.1% ulceration rate)

• **Phase 2 dose-ranging, efficacy study underway:** will provide a robust package of efficacy and metabolism data for regulatory bodies and global partners

• **Potential to disrupt global pain market:** the global pain market, including opioids, exceeds $20 billion and would benefit greatly from GI-safe and non-addictive therapies

• **Commercial asset in regenerative medicine:** Antibe’s subsidiary, Citagenix, is poised for growth in the dental biologics market with a revenue base of $10 million¹

• **Seasoned management team, Board of Directors and advisors**

¹ Annual run rate based on the six month period ended September 30, 2019
Thank You.