Aytu BioScience (NASDAQ: AYTU)

Corporate Overview | June 2019



Forward-Looking Statement

This presentation includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, or the Exchange Act. All statements other than statements of historical facts contained in this presentation, including statements regarding our anticipated future clinical and regulatory events, future financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. Forward looking statements are generally written in the future tense and/or are preceded by words such as "may," "will," "should," "forecast," "could," "expect," "suggest," "believe," "estimate," "continue," "anticipate," "intend," "plan," or similar words, or the negatives of such terms or other variations on such terms or comparable terminology. These statements are just predictions and are subject to risks and uncertainties that could cause the actual events or results to differ materially. These risks and uncertainties include, among others: risks relating to gaining market acceptance of our products; obtaining reimbursement by third-party payers; the potential future commercialization of our product candidates; the anticipated start dates, durations and completion dates, as well as the potential future results of our ongoing and future clinical trials; the anticipated designs of our future clinical trials; the timing, our future regulatory submissions and events; our anticipated future cash position; and future events under our current and potential future collaborations. We also refer you to the risks described in "Risk Factors" in Part I, Item 1A of Aytu BioScience, Inc.'s Annual Report on Form 10-K and in the other reports and documents we file with the Securities and Exchange Commission from time to time.

Corporate Overview

- Commercial-stage, revenue-generating specialty pharmaceutical company
 - Acquired commercial portfolio of FDA-approved, revenue-generating products
 - Uniquely delivered products addressing large markets (TAM = \$6.5-\$7 BN)
- Best-in-class, FDA-approved products with novel delivery forms



13 million U.S. men affected6.8 million Rxs annually\$1.8 billion Rx category

Only FDA-Approved, Nasally-Administered Testosterone Replacement Therapy (TRT)



Up to 30% of U.S. adults affected 43 million Rxs annually \$1.8 billion Rx category

Only FDA-Approved, Oral Spray Zolpidem Tartrate

Tuzistra[®]XR®

(Codeine Polistirex and Chlorpheniramine Polistirex) EXTENDED-RELEASE ORAL SUSPENSION

- \$3 billion Rx category
- 30-35 million Rxs annually

Only FDA-approved 12-Hour codeine suspension

- Established, U.S.-based, commercial infrastructure
- MiOXSYS® male infertility diagnostic device growing ex-US footprint

Commercially-Focused Management Team with a History of Growing Commercial Organizations

Josh Disbrow - Chairman & CEO

- Former VP of Commercial Operations at Arbor Pharmaceuticals where revenues grew from zero to over \$127MM in < 5 years; Acquired by KKR
- Previous COO of Ampio Pharmaceuticals (NYSE: AMPE) and head of Business Unit
- Progressive commercial roles at LipoScience, Cyberonics, and GlaxoSmithKline

Jarrett Disbrow – COO & Head of Commercial Ops

- Founder and original President/CEO of Arbor Pharmaceuticals where revenues grew from zero to over \$127MM in <5 years; Acquired by KKR
- Former CEO of Vyrix Pharmaceuticals, a specialty pharmaceutical company focused on male sexual dysfunction
- Progressive commercial roles at Accentia Pharmaceuticals, GlaxoSmithKline

David Green, CPA – Chief Financial Officer

- Former CFO of Specialized Health Products International and Catheter Connections, acquired by CR Bard and Merit Medical, respectively
- Former Chief Accounting Officer of Intarcia Therapeutics
- Previous Managing Director of Duff & Phelps and Director of E&Y Capital Markets



Natesto[®]: The Only FDA-Approved, Nasally-Administered Testosterone Replacement Therapy (TRT)

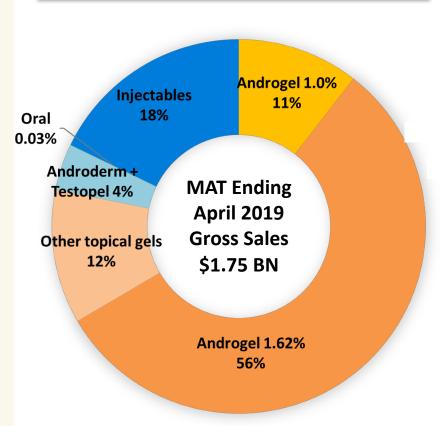


Testosterone Market Opportunity

Significant Market Need

- **6.8 Million** annual TRT scripts
- **13 Million** men diagnosed in the U.S.
- Current topical treatments (AndroGel®, Axiron®) have a BLACK BOX WARNING related to transference of testosterone
- Decrease in Big Pharma promotion in testosterone replacement therapy (TRT) category, yet substantial treatment needs remain
 - Androderm® no promotion/IP
 - AndroGel® 1.0% & 1.62% now generic
 - Axiron[®] discontinued/generic

U.S. TRT Market





Natesto : The Only Nasally Delivered Low T Therapy

The Only FDA-Approved Intranasal Testosterone



- Fast, clean application
- Easy to use and transport
- Rapid T_{max} < 1 hour</p>

- Uniquely-delivered, patented TRT with multiple advantages over existing treatment options
- Only nasally-administered: rapid, pulsatile drug delivery
- Delivers the <u>lowest dose</u> among topical testosterones (5.5 mg/dose)

No BLACK BOX Warning

- Natesto is the *only* topical TRT without a BLACK BOX warning
- All others carry a "BLACK BOX warning" due to the risk of transference

↓ AndroGel BLACK BOX Warning ↓

AndroGel® (testosterone gel) 1.62% for topical use CIII Initial U.S. Approval: 1953

WARNING: SECONDARY EXPOSURE TO TESTOSTERONE

See full prescribing information for complete boxed warning.

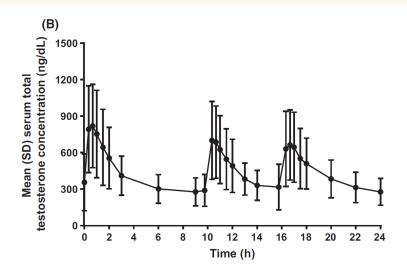
- Virilization has been reported in children who were secondarily exposed to testosterone gel (5.2, 6.2).
- Children should avoid contact with unwashed or unclothed application sites in men using testosterone gel (2.2, 5.2).
- Healthcare providers should advise patients to strictly adhere to recommended instructions for use (2.2, 5.2, 17).



Unique Pharmacokinetic Profile Leads to a Distinct Clinical Profile for Natesto

Rapid Absorption & Clearance

- 90% achieved normal T levels
- Cmax of 1,044 ng/dL at 40 minutes
- <u>Pulsatile dosing</u> more closely mimics natural testosterone production



Significant Symptom Improvement

- Natesto causes statistically significant improvements in each of the 5 domains of erectile function; the majority of the effect was evident by Day 30 (P < 0.0001)
- Natesto causes substantial increase in positive affect (mood) AND a substantial decrease in negative affect as early as Day 30 (p < 0.0001)



The Clinical Significance of the Natesto Spermatogenesis Study is Substantial

"Currently, <u>there are no FDA-approved therapies</u> to treat men with low testosterone who wish to preserve their fertility.

About 20% of men with Low T deal with these decisions, and Natesto could be an alternative for simultaneously increasing testosterone while preserving sperm production."

Ranjith Ramasamy, MD

Director of Reproductive Urology

Miller School of Medicine
University of Miami



Natesto: Shifting the Fertility Paradigm in Low T Treatment

Current Tx Paradigm



"As this study has shown in a randomized, double-blind, double-dummy, placebo-controlled manner, exogenous testosterone therapy with Androgel can clearly decrease sperm production and potentially impact fertility."

Edward Kim, MD

Urologist
University of Tennessee Medical Center
Study published in *BJU International*October 27, 2015

42 men treated

Natesto Tx Paradigm



"We have so far found that, in all of the men that have been on the [Natesto] therapy for at least three months, they're very happy, their testosterone levels have improved, and their sperm production is maintained."

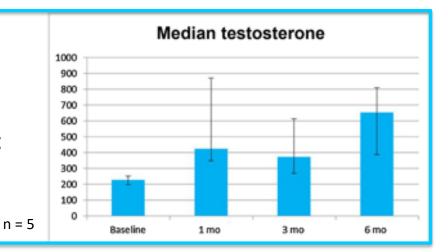
Ranjith Ramasamy, MD

Director of Reproductive Urology
University of Miami
Interview excerpt – ABC News Local 10
May 1, 2018 23 men completed 3 months

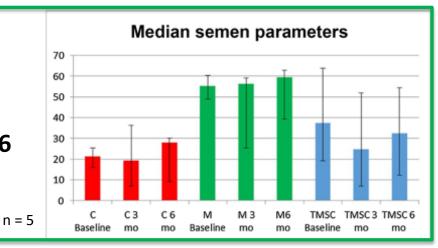


Preliminary Published Data: Natesto Boosts Testosterone while Maintaining Semen Parameters

Median testosterone levels increased significantly at 1, 3, and 6 months after treatment with Natesto.



Sperm concentration (RED), motility (GREEN), and total motile sperm count (BLUE) remained unchanged through 6 months of treatment with Natesto.



As published in: EUROPEAN UROLOGY



Study Underway to Assess Natesto's Impact on Sperm Production & Endogenous Testosterone

Study Summary

- Natesto Effects on Testosterone, Luteinizing Hormone, Follicle Stimulating Hormone and Semen Parameters
 - This would be the first study ever to demonstrate minimal, or no impact of a TRT on sperm production and testosterone levels
 - Prospective, open-label study investigating Natesto's impact on patients' semen parameters, endogenous testosterone production, and LH/FSH levels
 - Assesses 40 patients with confirmed hypogonadism (testosterone (T) < 350 on 2 consecutive samples collected more than 1.5 hours apart in the morning
 - 2 complete sperm cycles ~ 24 weeks; 6 study visits
- Principal Investigator: Ranjith Ramasamy, MD
 - Director of Male Reproductive Medicine and Surgery;
 Assistant Professor; Department of Urology University of Miami
- Primary endpoint: Change in Testosterone, Semen Parameters,
 Follicle Stimulating Hormone, Luteinizing Hormone, and Estradiol
- Final readout expected Summer 2019



ZolpiMist™: The Only FDA-Approved, oral spray Zolpidem Tartrate



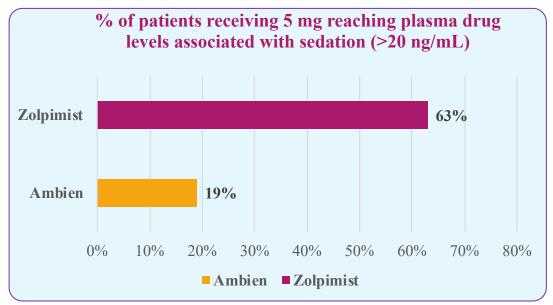
ZolpiMiST: Sleep, Delivered, Fast

- Novel, rapid-acting oral spray formulation of most prescribed prescription sleep aid, zolpidem tartrate
- Significant patient advantages over Ambien® including:
 - Rapid onset of action to deliver faster sleep onset than
 Ambien
 - Significantly more patients achieved therapeutic blood levels in 15 minutes with ZolpiMist oral spray than with Ambien tablets
 - Effective for patients with difficulty swallowing
- Large market 1% TRx market share = ~\$50M



ZolpiMiST: Sleep, Delivered, Fast

- ZolpiMist initiates sleep quicker than Ambien
- In the ZolpiMist Clinical Study Report for FDA approval, significantly more patients achieved therapeutic blood levels in 15 minutes with ZolpiMist oral spray than Ambien tablets



Tuzistra® XR: The Only FDA-approved, 12-hour Codeine Suspension



Tuzistra®XR@: All-Day, All-Night Cough Relief

- Only FDA-approved codeine-based antitussive suspension with 12-hour dosing
 - Current codeine syrups are dosed every 4-6 hours
- Patented, extended-release oral suspension codeine polistirex and chlorpheniramine polistirex oral
 - Two Orange Book-listed patents; others pending
- Novel, follow-on antitussive pending FDA review

\$3BN U.S. Market

30-35 million Rxs annually



MiOXSYS®: First-in-class, CE Marked male infertility diagnostic system



MioX^{SYS°} for Male Infertility

First-in-Class In Vitro Diagnostic Device

- CE Marked, Health Canada Cleared, Australian TGA Approved; Mexican COFEPRAS Approved, Rapid IVD test available for in-office testing to screen for male infertility
 - Measures oxidative stress in male infertility cases that would otherwise go undetected with a routine semen analysis
 - Minimal footprint and procedure, as compared to other methods
- Currently sold in over 30 countries
- U.S. clinical and 510k de novo regulatory pathway expected to be relatively short and well defined
- Razor-razorblade commercial model with recurring revenues from disposable, single-use sensors



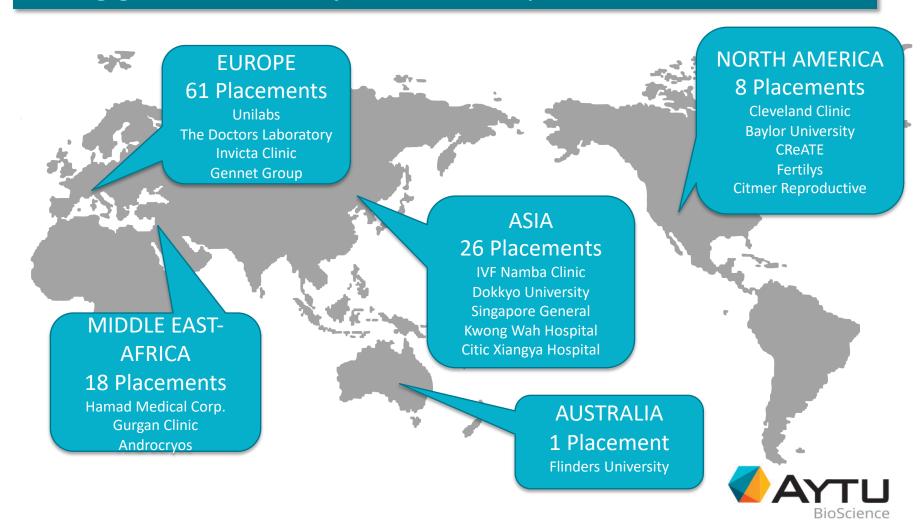
"This new test can rapidly help clinicians identify infertile patients with confidence, so that treatment strategies can be initiated immediately. This in turn helps the clinic improve the chances of pregnancy."

Ashok Agarwal, PhD
Professor & Director of Andrology Laboratory
Cleveland Clinic



Commercialized Globally at Leading Centers

Strong global sales footprint – currently in over 30 countries

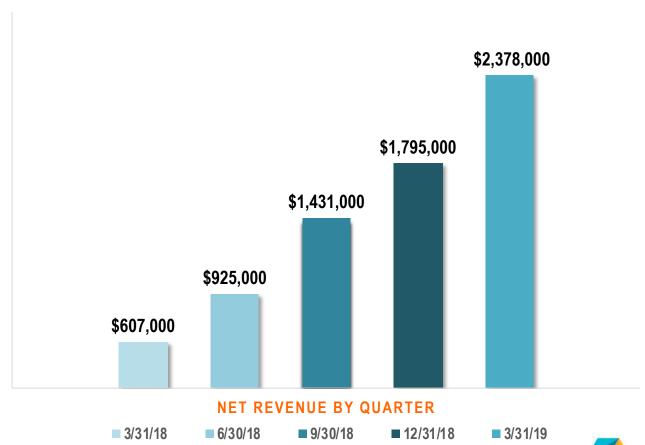


Sales Performance, Capitalization, and Investment Considerations



Strong Sequential Revenue Growth

~300% Revenue Growth over Five Quarters





Capitalization & Cash Balance

Cash Balance as of March 31, 2019: ~\$15 million

Common stock	17,538,071
Preferred stock(1)	3,594,981
Comon stock equivalents	21,133,052
Options and warrants ₍₂₎	16,536,272
Fully diluted common stock	37,669,324

- (1) Preferred stock has no voting rights and converts one-for-one into common stock.
- (2) Average exercise price \$4.16; weighted average time to expiration 4.54 years.



Aytu Investment Considerations

- Rapidly growing, revenue generating, specialty pharmaceutical company
 - 30+% sequential growth over last four quarters
- Growing product portfolio addressing large markets
 - Natesto Low T (~\$1.8BN TAM)
 - ZolpiMist Insomnia (~\$1.8BN TAM)
 - Tuzistra XR Cough (~\$3BN TAM)
- Nationwide sales force
 - U.S.-based, specialty sales force with national footprint
 - Sales forced leveraged by selling all three products
 - Significant customer overlap across three therapeutic areas
- Upcoming and ongoing catalysts:
 - Natesto sperm study final data readout and publication Summer 2019
 - Robust quarterly revenue growth expected
 - Natesto, ZolpiMist, and Tuzistra XR Rx/revenue growth
 - ZolpiMist ex-US regulatory and commercial/approval milestones
 - MiOXSYS ex-US regulatory and commercial/approval milestones
 - FDA approval of Tuzistra XR follow-on product



Contact Information

Josh Disbrow

Chairman & Chief Executive Officer

+1 (720) 437-6520

josh.disbrow@aytubio.com

