

SECURITIES & EXCHANGE COMMISSION EDGAR FILING

AYTU BIOSCIENCE, INC

Form: 424B5

Date Filed: 2020-03-20

Corporate Issuer CIK: 1385818

PRELIMINARY PROSPECTUS SUPPLEMENT
(to Prospectus dated December 1, 2017)



Aytu BioScience, Inc.
12,539,187 Shares of Common Stock
Warrants to Purchase up to 12,539,187 Shares of Common Stock
Placement Agent Warrants to Purchase up to 815,047 Shares of Common Stock

We are offering 12,539,187 shares of our common stock and warrants to purchase up to 12,539,187 shares of common which we refer to in this prospectus supplement as the "Warrants", pursuant to this prospectus supplement and accompanying prospectus to several institutional investors. The exercise price of each Warrant will equal \$1.47 per share. This prospectus supplement also relates to the offering of common stock issuable upon exercise of such Warrants.

Our common stock is listed on The Nasdaq Capital Market under the symbol "AYTU." There is no established trading market for any of the Warrants, and we do not expect a market to develop. We do not intend to apply for a listing for any of the warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Warrants will be limited.

The last reported sale price of our common stock on March 18, 2020, was \$1.47 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" beginning on page S-7 of this prospectus supplement and page 6 of the accompanying prospectus, as well as the risks and uncertainties described under the heading "Risk Factors" contained in our annual report on Form 10-K for the year ended June 30, 2019, before investing in our securities.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus supplement. Any representation to the contrary is a criminal offense.

We have engaged H.C. Wainwright & Co., LLC, or the placement agent, as our exclusive placement agent in connection with this offering. The placement agent has no obligation to buy any of the securities from us or to arrange for the purchase or sale of any specific number or dollar amount of securities. We have agreed to pay the placement agent the placement agent fees set forth in the table below. Pursuant to this prospectus supplement and the accompanying prospectus, we will also issue warrants to purchase up to 815,047 shares of our common stock (the "Placement Agent Warrants") to the placement agent, or its designees, as part of the compensation payable to the placement agent. The Placement Agent Warrants will have an exercise price of \$1.9938 per share and will expire five years from the effective date of this offering. We are also registering pursuant to this prospectus supplement and the accompanying prospectus the shares of common stock issuable upon exercise of the Placement Agent Warrants. See "Plan of Distribution" beginning on page S-22 of this prospectus supplement for more information regarding these arrangements.

	PER SHARE	TOTAL
Offering Price	\$ 1.595	\$20,000,003.265
Placement Agent Fees (1)	\$ 0.119	\$ 1,500,000.245
Proceeds, before expenses, to us	<u>\$ 1.476</u>	<u>\$ 18,500,003.02</u>

(1) In addition, we have agreed to reimburse the placement agent for certain out-of-pocket expenses. See "Plan of Distribution" beginning on page S-22 of this prospectus supplement for additional information with respect to the compensation we will pay the placement agent

Delivery of the common shares, Warrants and the Placement Agent Warrants is expected to be made on or about March 23, 2020, subject to the satisfaction of certain conditions.

H.C. Wainwright & Co.

The date of this prospectus supplement is March 19, 2020

TABLE OF CONTENTS

Prospectus Supplement

	Page
ABOUT THIS PROSPECTUS SUPPLEMENT	S-ii
PROSPECTUS SUPPLEMENT SUMMARY	S-1
RISK FACTORS	S-7
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	S-11
USE OF PROCEEDS	S-12
DILUTION	S-13
DIVIDEND POLICY	S-15
DESCRIPTION OF THE SECURITIES WE ARE OFFERING	S-16
CERTAIN MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS	S-18
PLAN OF DISTRIBUTION	S-23
LEGAL MATTERS	S-24
EXPERTS	S-24
WHERE YOU CAN FIND MORE INFORMATION	S-25
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	S-26

Prospectus

	Page
ABOUT THIS PROSPECTUS	1
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	1
ABOUT AYTU BIOSCIENCE, INC.	2
RISK FACTORS	6
USE OF PROCEEDS	6
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF WARRANTS	8
DESCRIPTION OF UNITS	9
PLAN OF DISTRIBUTION	9
LEGAL MATTERS	11
EXPERTS	11
WHERE YOU CAN FIND MORE INFORMATION	11
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	12

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and accompanying prospectus relates to the offering of our securities. Before buying any of the securities that we are offering, we urge you to carefully read this prospectus supplement, the accompanying prospectus, any free writing prospectus that we have authorized for use in connection with this offering, and the information incorporated by reference as described under the headings “Where You Can Find More Information” and “Information Incorporated by Reference” in this prospectus supplement. These documents contain important information that you should consider when making your investment decision.

This document is comprised of two parts. The first part is this prospectus supplement, which describes the specific terms of this offering and also adds to, and updates information contained in, the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference into the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to the combined document consisting of this prospectus supplement and the accompanying prospectus. In this prospectus supplement, as permitted by law, we “incorporate by reference” information from other documents that we file with the Securities and Exchange Commission, or the SEC. This means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus and should be read with the same care. When we make future filings with the SEC to update the information contained in documents that have been incorporated by reference, the information included or incorporated by reference in this prospectus supplement is considered to be automatically updated and superseded. In other words, in case of a conflict or inconsistency between information contained in this prospectus supplement and information in the accompanying prospectus or incorporated by reference into this prospectus supplement, you should rely on the information contained in the document that was filed later.

This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed on November 22, 2017 with the SEC using a “shelf” registration process with respect to up to \$100,000,000 in securities that may be sold thereunder. The shelf registration statement was declared effective by the SEC on December 1, 2017.

Under the shelf registration process, we may offer and sell any combination of securities described in the accompanying prospectus in one or more offerings. The purpose of this prospectus supplement is to provide supplemental information regarding us in connection with this offering of securities.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement, the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering. We have not authorized any other person to provide you with different information. We are not making an offer to sell or soliciting an offer to buy our securities in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference into this prospectus supplement and the accompanying prospectus, and in any free writing prospectus that we have authorized for use in connection with this offering, is accurate only as of the date of those respective documents. Our business, financial condition, results of operations, and prospects may have changed since those dates.

PROSPECTUS SUPPLEMENT SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in this prospectus supplement or the accompanying prospectus, or incorporated in this prospectus supplement or the accompanying prospectus by reference. This summary does not contain all of the information you should consider before buying securities in this offering. You should carefully read this entire prospectus supplement and the accompanying prospectus, including each of the documents incorporated herein or therein by reference, before making an investment decision. Unless the context otherwise requires, the terms "Aytu," "the Company," "we," "us" and "our" in this prospectus supplement and accompanying prospectus refer to Aytu Bioscience, Inc., and its subsidiaries.

Recent Developments

On March 19, 2020, the Company and L.B. Resources, Limited agreed to expand the exclusive distribution agreement to Canada and Mexico.

On March 12, 2020, the Company entered into a securities purchase agreement with certain institutional investors pursuant to which the Company agreed to sell and issue, in a registered direct offering, an aggregate of (i) 16,000,000 shares of the Company's common stock at a purchase price per share of common stock \$1.25 and (ii) warrants to purchase up to 16,000,000 shares of common stock at an exercise price of \$1.25 per share, for aggregate gross proceeds to the Company of \$20.0 million, before deducting placement agent fees and other offering expenses payable by the Company. We refer to this registered direct offering as the "Second RD Offering" which closed on March 13, 2020. In connection with the Second RD Offering, we agreed to issue warrants to H.C. Wainwright & Co., LLC who served as our placement agent in connection with the Second RD Offering issuable for 1,040,000 shares of our common stock with an exercise price of \$1.5625 per share. As of March 19, 2020, 4,075,000 of the March 12, 2020 \$1.25 warrants were exercised into 4,075,000 shares of common stock for gross proceeds of approximately \$5.1 million.

On March 10, 2020, the Company entered into a securities purchase agreement with an institutional investor pursuant to which the Company agreed to sell and issue, in a registered direct offering, an aggregate of (i) 4,450,000 shares of the Company's common stock at a purchase price per share of common stock of \$1.15 and (ii) pre-funded warrants to purchase up to 3,376,087 shares of common stock at an effective price of \$1.15 per share (\$1.1499 paid to the Company upon the closing of the offering and \$0.0001 to be paid upon exercise of such pre-funded warrants), for aggregate gross proceeds to the Company of approximately \$9.0 million, before deducting placement agent fees and other offering expenses payable by the Company. We refer to this registered direct offering as the "First RD Offering" which closed on March 13, 2020. In connection with the First RD Offering, we agreed to issue warrants to H.C. Wainwright & Co., LLC who served as our placement agent in connection with the First RD Offering issuable for 508,696 shares of our common stock with an exercise price of \$1.4375 per share. As of March 19, 2020, all of the 3,376,087 pre-funded warrants were exercised into 3,376,087 shares of common stock.

On March 9, 2020, the Company signed an exclusive distribution agreement for the right to commercialize a coronavirus 2019 rapid test. The test has been licensed from L.B. Resources, Limited, which licensed North American rights from product developer Zhejiang Orient Gene Biotech Co., Ltd.

On February 27, 2020, the Company issued a promissory note to an unrelated third-party investor in which the investor loaned gross proceeds of \$800,000 to the Company. The unsecured, nonconvertible note has an OID of \$160,000 and the Company received net proceeds of \$640,000. The note will be repaid by the Company with eight consecutive monthly payments to the investor in the amount of \$100,000, beginning April 1, 2020.

On February 14, 2020, we completed the acquisition of Innovus Pharmaceuticals. Through this acquisition, Aytu expands into the \$40 billion consumer healthcare market with a portfolio of over thirty-five consumer products competing in large therapeutic categories including diabetes, men's health, sexual wellness and respiratory health. This expanded product line broadens Aytu's portfolio beyond its \$20 million prescription therapeutic portfolio to enable wider revenue distribution and consumer reach, reduced seasonality associated with Aytu's seasonal antitussive product line, and higher revenue from an expanded base of proprietary products.

Combined, Aytu and Innovus generated approximately \$43 million in revenue over the preceding four quarters ended December 31, 2019 when accounting for the Innovus business and the recently expanded Rx portfolio following the acquisition of nine pediatric primary care products from Cerecor, Inc.

This business combination provides increased scale and enables operational synergies that can be leveraged to accelerate the combined company's growth and path to profitability. Initially, the company expects to operate the commercial aspects of the Innovus consumer business separately from Aytu's prescription business, while rationalizing general and administrative expenses through the removal of Innovus' public company costs and redundant administrative and operational processes, along with the reduction in overhead, administrative and facilities costs.

The prescription product portfolio will continue to be primarily commercialized through the existing Aytu sales force, while the consumer health products will continue to be primarily commercialized via Innovus' proprietary Beyond Human® marketing platform. However, we expect both lines of business to benefit from opportunistic cross-selling such that some consumer products may be marketed in the professional market by Aytu's Rx commercial team, while the marketing of the prescription products may be bolstered through various online and direct-to-consumer marketing initiatives.

Legal Matters

In May 2017, we entered into a commercial agreement with WWPIL, a wholly-owned subsidiary of Hikma Pharmaceuticals PLC ("Hikma") (LSE: HIK) (NASDAQ Dubai: HIK) (OTC: HKMPY). Pursuant to the commercial agreement, WWPIL provided us with the rights to launch our branded, fluticasone propionate nasal spray USP, 50 mcg per spray (FlutiCare®), under WWPIL's FDA approved ANDA No. 207957 in the U.S. in mid-November 2017. The initial term of the commercial agreement is for two years, and upon expiration of the initial term, the agreement will automatically renew for subsequent one-year terms unless either party notifies the other party in writing of its desire not to renew at least 90 days prior to the end of the then current term. The agreement requires us to meet certain minimum product batch purchase requirements in order for the agreement to continue to be in effect. In November 2019, we terminated the Hikma agreement because in our view Hikma failed to provide us with releasable product in the required timeline. We have, however, agreed to purchase the remainder of the one batch that we ordered in 2019. Hikma has disputed our right to terminate the agreement going forward, and the parties are in settlement discussions regarding whether to continue any future arrangement.

On August 24, 2018, the Company received a letter from the Marin County District Attorney's Office requesting substantiation for certain advertising claims made for certain of the Company's products, DiabaSens®, and Apeaz® that were marketed and sold to customers in that County. The Marin County District Attorney's Office is part of a larger ten county Northern California Task Force of district attorneys to handle customer protection matters. In November 2018, the Company responded through its regulatory attorneys to the Marin County's District Attorney's letter. In March 2019, the Company heard back from the Marin County District Attorney. In April 2019, the Company responded to the letter and in June 2019 the Company met with the Northern California Task Force. The Company is currently negotiating a settlement agreement with the Marin County District Attorney's office, though no assurance can be given that a settlement will be reached.

Overview

We are a specialty pharmaceutical company focused on commercializing novel products that address significant patient needs such as hypogonadism (low testosterone), cough and upper respiratory symptoms, insomnia, male infertility, and various pediatric conditions and we plan to expand opportunistically into other therapeutic areas as we continue to execute on our growth plans. We commercialize our products through our internal commercial infrastructure and nationwide direct sales force.

We have been historically focused on commercialization of the following products (i) Natesto®, a testosterone replacement therapy, or TRT, (ii) ZolpiMist™, a short-term insomnia treatment, and (iii) Tuzistra® XR, a codeine-based antitussive.

Additionally, we completed an Asset Purchase Agreement (the "Purchase Agreement") with Cerecor, Inc ("Cerecor") on November 1, 2019, acquiring six products, (i) AcipHex® Sprinkle™, (ii) Cefaclor for Oral Suspension, (iii) Karbinal® ER, (iv) Flexichamber™, (v) Poly-Vi-Flor® and Tri-Vi-Flor™ (the "Pediatric Portfolio"). We immediately began to include these acquired Pediatric Portfolio in our commercialization efforts in order to leverage our internal commercial infrastructure and national sales force.

Finally, on February 14, 2020 we successfully completed the acquisition of Innovus Pharmaceuticals, Inc., resulting in our entrance into the approximately \$40 billion consumer healthcare market with a portfolio of over thirty-five consumer products.

In the future we will seek to acquire additional commercial-stage or near-market products, including existing products we believe can offer distinct clinical advantages and patient benefits over existing other marketed products. Our management team's prior experience has involved identifying both clinical-stage and commercial-stage assets that can be launched or re-launched to increase value, with a focused commercial infrastructure specializing in novel, niche products.

Key Product Highlights

Primary Care Rx Portfolio

Prior to November 1, 2020, we were focused on the commercial development of the following three primary care focused products:

- *Natesto®* – In 2016 We acquired exclusive U.S. rights to Natesto® (testosterone) nasal gel, a novel formulation of testosterone delivered via a discreet, easy-to-use nasal gel. Natesto is approved by the U.S. Food and Drug Administration, or FDA, for the treatment of hypogonadism (low testosterone) in men and is the only testosterone replacement therapy, or TRT, delivered via a nasal gel. Natesto offers multiple advantages over currently available TRTs and competes in a \$1.7 billion market accounting for nearly 7 million prescriptions annually. Importantly, as Natesto is delivered via the nasal mucosa and not the skin, there is no risk of testosterone transference to others, a known potential side effect and black box warning associated with all other topically applied TRTs, including the market leader AndroGel®.
- *ZolpiMist™* – In June 2018 we acquired an exclusive U.S. license to ZolpiMist™. ZolpiMist is an FDA-approved prescription product that is indicated for the short-term treatment of insomnia, and is the only oral spray formulation of zolpidem tartrate - the most widely prescribed prescription sleep aid in the U.S. ZolpiMist is commercially available and competes in the non-benzodiazepine prescription sleep aid category, a \$1.8 billion prescription drug category with over 43 million prescriptions written annually. Thirty million prescriptions of zolpidem tartrate (Ambien®, Ambien® CR, Intermezzo®, Edluar®, ZolpiMist™, and generic forms of immediate-release, controlled release, and orally dissolving tablet formulations) are written each year in the U.S., representing almost 70% of the non-benzodiazepine sleep aid category. Approximately 2.5 million prescriptions are written for novel formulations of zolpidem tartrate products (controlled release and sublingual tablets). We intend to integrate ZolpiMist into our sales force's promotional efforts as an adjunct product to Natesto as there is substantial overlap of physician prescribers of both testosterone and prescription sleep aids.
- *Tuzistra® XR* – In November 2018 we acquired Tuzistra XR, the only FDA-approved 12-hour codeine-based antitussive. Tuzistra XR is a prescription antitussive consisting of codeine polistirex and chlorpheniramine polistirex in an extended-release oral suspension. Tuzistra XR is a patented combination of codeine, an opiate agonist antitussive, and chlorpheniramine, a histamine-1 receptor antagonist, indicated for relief of cough and symptoms associated with upper respiratory allergies or a common cold in adults aged 18 years and older. Tuzistra XR is protected by two Orange Book-listed patents extending to 2031 and multiple pending patents. According to MediMedia, the US cough cold prescription market is worth in excess of \$3 billion at current brand pricing, with 30-35 million annual prescriptions. This market is dominated by short-acting treatments, which require dosing 4-6 times a day. Tuzistra XR was developed using Tris Pharma's liquid sustained release technology, LiquiXR®, which allows for extended drug delivery throughout a 12-hour dosing period.

The Pediatric Rx Portfolio

In November 2019 we acquired a portfolio of pediatric primary care products (the “Commercial Portfolio”) from Cerecor, Inc. in order to expand our portfolio of commercial-stage products and further leverage our commercial infrastructure and sales force. Through this acquisition the Company now commercializes nine prescription products and sells directly to pediatric and primary care physicians throughout the U.S.

The Commercial Portfolio contains established prescription products competing in markets exceeding \$8 billion in annual U.S. sales. Each product has distinct clinical features and patient-friendly benefits and are indicated to treat common pediatric and primary care conditions.

- *AcipHex® Sprinkle™ (rabeprazole sodium)* – AcipHex Sprinkle is a granule formulation of rabeprazole sodium, a commonly prescribed proton pump inhibitor. AcipHex Sprinkle is indicated for the treatment of gastroesophageal reflux disease (GERD) in pediatric patients 1 to 11 years of age for up to 12 weeks.
- *Cefaclor (cefaclor oral suspension)* – Cefaclor for oral suspension is a second-generation cephalosporin antibiotic suspension and is indicated for the treatment of numerous common infections caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, staphylococci, and *Streptococcus pyogenes*, and others.
- *Flexichamber®* – Flexichamber is an anti-static, valved collapsible holding chamber intended to be used by patients to administer aerosolized medication from most pressurized metered dose inhalers (MDIs) such as commonly used asthma medications.
- *Karbinal® ER (carbinoxamine maleate extended-release oral suspension)* – Karbinal ER is an H1 receptor antagonist (antihistamine) indicated to treat various allergic conditions including seasonal and perennial allergic rhinitis, vasomotor rhinitis, and other common allergic conditions.
- *Poly-Vi-Flor® and Tri-Vi-Flor®* – Poly-Vi-Flor and Tri-Vi-Flor are two complementary prescription fluoride-based supplement product lines containing combinations of vitamins and fluoride in various oral formulations. These prescription supplements are prescribed for infants and children to treat or prevent fluoride deficiency due to poor diet or low levels of fluoride in drinking water and other sources.

Innovus Merger (Consumer Portfolio)

Upon the February 14, 2020 acquisition of Innovus Pharmaceuticals, Inc., we now market and sell over 35 products in the U.S. and more than 10 in multiple countries around the world through 5 international commercial partners. The following represents the core products:

- Vesele®
- UriVarx®
- FlutiCare®
- Apeaz®
- Diabasens®
- Prostagorx®
- Sensum+®
- Trexar®

In addition, we currently expect to launch in the U.S. the following products in 2020, subject to the applicable regulatory approvals, if required:

- Musclin® is a proprietary supplement made of two FDA Generally Recognized As Safe (GRAS) approved ingredients designed to increase muscle mass, endurance and activity (first half of 2020). The main ingredient in Musclin® is a natural activator of the transient receptor potential cation channel, subfamily V, member 3 (TRPV3) channels on muscle fibers responsible to increase fibers width resulting in larger muscles;
- Regenerum™ is a proprietary product containing two natural molecules: the first is an activator of the TRPV3 channels resulting in the increase of muscle fiber width, and the second targets a different unknown receptor to build the muscle's capacity for energy production and increases physical endurance, allowing longer and more intense exercise. Regenerum™ is being developed for patients suffering from muscle wasting. We currently expect to launch this product in 2020 pending successful clinical trials in patients with muscle wasting or cachexia;
- Octiq™ is an expected FDA ophthalmic OTC monograph compliant product for the treatment of eye redness and eye lubrication (early 2020); and
- Regoxidine™ is an ANDA approved 5% Minoxidil foam for men and women for hair growth on the top of the scalp (first half 2020).

We have extensive experience across a wide range of business development activities and have in-licensed or acquired products from large, mid-sized, and small enterprises in the United States and abroad. Through an assertive product and business development approach, we expect that we will continue to build a substantial portfolio of complementary products.

Our Strategy

In the near-term, we expect to create value for shareholders by implementing a focused strategy of increasing sales of our prescription therapeutics while leveraging our commercial infrastructure. Further, we expect to increase sales of our newly acquired consumer healthcare product portfolio following the closing of our acquisition of Innovus Pharmaceuticals. Additionally, we expect to expand both our Rx and consumer health product portfolios through continuous business and product development. Finally, we expect to identify operational efficiencies identified through our recent transactions and implement expense reductions accordingly,

Corporate Information

Our principal executive offices are located at 373 Inverness Parkway, Suite 206, Englewood, Colorado 80112, and our phone number is (720) 437-6580. Our corporate website address is <http://www.aytubio.com>. The information contained on, connected to or that can be accessed via our website is not part of this prospectus. We have included our website address in this prospectus as an inactive textual reference only and not as an active hyperlink.

THE OFFERING

Common Stock offered by us pursuant to this prospectus supplement	12,539,187 shares of common stock
Warrants offered by us pursuant to this prospectus supplement	We are also offering to institutional investors Warrants to purchase up to 12,539,187 shares of common stock. The exercise price of each Warrant will be \$1.47 per share. Each Warrant will be exercisable immediately upon issuance and will expire upon the one year anniversary of the closing date. This prospectus supplement also relates to the offering of the common shares issuable upon exercise of such Warrants. See "Description of Warrants" for a discussion on the terms of the Warrants.
Placement Agent Warrants	We will also issue Placement Agent Warrants to purchase up to 815,047 shares of common stock (and the shares of common stock issuable upon the exercise of the Warrants) to our placement agent (or its designees) as part of the compensation payable to our placement agent in connection with this offering. The Placement Agent Warrants will have an exercise price of \$1.9938 per share (which represents 125% of the offering price per share sold in this offering) and will expire one year from the effective date of this offering. Please refer to "Plan of Distribution" for additional information with respect to the Placement Agent Warrants.
Common Stock to be outstanding immediately after this offering	90,952,162 shares of common stock.
Common Stock to be outstanding immediately after this offering (including the shares of common stock underlying the Warrants and excluding the shares of common stock issuable upon the exercise of the Placement Agent Warrants)	103,491,349 shares of common stock
Offering Price Per Share of Common Stock	\$1.595 per share of common stock
Exercise price per Warrant	\$1.47 per warrant
Listing	Our common stock is listed on The Nasdaq Capital Market under the symbol "AYTU". The Warrants and Placement Agent Warrants will not be listed for trading on any national securities exchange
Use of Proceeds	We intend to use the net proceeds from this offering for general corporate purposes, including working capital. See "Use of Proceeds" on page S-12.
Risk Factors	Investing in our securities involves significant risks. You should read the "Risk Factors" section beginning on page S-7 of this prospectus supplement and in the documents incorporated by reference in this prospectus supplement and accompanying prospectus, including the risk factors described under the section entitled "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019, for a discussion of factors to consider before deciding to purchase our securities.
Certain Material U.S. Federal Income Tax Considerations	For a discussion of the material federal income tax consequences of purchasing, owning and disposing of common stock and the Warrants, please see the section entitled "Certain Material U.S. Federal Income Tax Considerations." You should consult your tax advisor with respect to the U.S. federal income tax consequences of owning common stock and/or Warrants in light of your own particular situation and with respect to any tax consequences arising under the laws of any state, local, foreign or other taxing jurisdiction.

The above discussion and table are based on 78,412,975 common shares outstanding as of March 18, 2020, which does not include the following:

- 1,482 shares of common stock issuable upon the exercise of stock options outstanding as of December 31, 2019 at a weighted average exercise price of \$325.54 per share of common stock. As of March 18, 2020, there were 13,937 common shares issuable upon the exercise of stock options outstanding as of March 10, 2020 with a weighted exercise price of \$34.69.
- 26,459,663 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2019, at a weighted average exercise price of \$2.92 per share of common stock. 25,507,601 are outstanding as of March 18, 2020, with a weighted average exercise price of \$2.91.
- an additional 403,209 shares of common stock that are available for future issuance under our stock option plan as of December 31, 2019, which was subsequently increased by 2,000,000 shares upon receiving shareholder approval on February 13, 2020.
- 508,696 shares of common stock issuable upon the exercise of the warrants issued to H.C. Wainwright & Co., LLC or its assignees in connection with the First RD Offering on March 13, 2020.
- 12,075,000 shares of common stock issuable upon the exercise of warrants issued in connection with the Second RD Offering on March 13, 2020.
- 1,040,000 shares of common stock issuable upon the exercise of warrants issued to H.C. Wainwright & Co., LLC or its assignees in connection with the Second RD Offering on March 13, 2020.
- 815,047 shares of common stock issuable upon the exercise of warrants to be issued to H.C. Wainwright & Co., LLC or its assignees in connection with the closing of this offering.

RISK FACTORS

An investment in our securities involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed below, the risk factors beginning on page 7 of the accompanying prospectus, as well as the risk factors discussed under the section entitled "Risk Factors" contained in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019 as updated by our subsequent filings under the Exchange Act, each of which is incorporated by reference in this prospectus supplement and accompanying prospectus in their entirety, together with all of the other information contained or incorporated by reference in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference herein and therein, and any related free writing prospectus. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. These risks might cause you to lose all or part of your investment in the offered securities.

Risks Related to our Operations

We are relying on FDA policies and guidance provisions that have changed very recently and relate directly to the 2019 coronavirus health crisis. If we misinterpret this guidance or the guidance changes unexpectedly and/or materially, potential sales of the COVID-19 test would be impacted.

The U.S. Food and Drug Administration (FDA) issued non-binding guidance for manufacturers relating to the pathway to enable FDA approval for devices related to testing for COVID-19 under an Emergency Use Authorization (EUA). Following the issuance of the initial published guidance, on March 16, 2020, revised guidance specific to COVID-19 'antibody tests' was issued. In this guidance document and in subsequent communications with FDA officials, the pathway to enable distribution of the COVID-19 test was further explained. If our interpretation of the newly revised guidance is incorrect or specifics around the guidance change, the sales of the COVID-19 test could be materially impacted.

If our recently licensed COVID-19 IgG/IgM Rapid Test does not perform as expected or the reliability of the technology is questioned, we could experience delayed or reduced market acceptance of the test, increased costs and damage to our reputation.

Our success depends on the market's confidence that we can provide a reliable, high-quality COVID-19 diagnostic test. We believe that customers in our target markets are likely to be particularly sensitive to product defects and errors. Our reputation and the public image of our licensed COVID-19 diagnostic test may be impaired if it fails to perform as expected or is perceived as difficult to use. Despite quality control testing, defects or errors could occur with the test.

In the future, if our licensed COVID-19 diagnostic test experiences a material defect or error, this could result in loss or delay of revenues, delayed market acceptance, damaged reputation, diversion of development resources, legal claims, increased insurance costs or increased service and warranty costs, any of which could harm our business. Such defects or errors could also prompt us to amend certain warning labels or narrow the scope of the use of our diagnostic tests, either of which could hinder our success in the market. Even after any underlying concerns or problems are resolved, any widespread concerns regarding our technology or any manufacturing defects or performance errors in the test could result in lost revenue, delayed market acceptance, damaged reputation, increased service and warranty costs and claims against us.

If we become subject to claims relating to improper handling, storage or disposal of hazardous materials, we could incur significant cost and time to comply.

Our research and development processes involve the controlled storage, use and disposal of hazardous materials, including biological hazardous materials. We are subject to foreign, federal, state and local regulations governing the use, manufacture, storage, handling and disposal of materials and waste products. We may incur significant costs complying with both existing and future environmental laws and regulations. In particular, we are subject to regulation by the Occupational Safety and Health Administration, or OSHA, and the Environmental Protection Agency, or EPA, and to regulation under the Toxic Substances Control Act and the Resource Conservation and Recovery Act in the United States. OSHA or the EPA may adopt additional regulations in the future that may affect our research and development programs. The risk of accidental contamination or injury from hazardous materials cannot be eliminated completely. In the event of an accident, we could be held liable for any damages that result, and any liability could exceed the limits or fall outside the coverage of our workers' compensation insurance. We may not be able to maintain insurance on acceptable terms, if at all.

Our licensed COVID-19 test has not been manufactured on a high-volume scale and could be subject to unforeseen scale-up risks.

While the manufacturer of the COVID-19 IgG/IgM Rapid Test has experience manufacturing diagnostic tests, there can be no assurance that they can manufacture the COVID-19 diagnostic test at a scale that is adequate for our current and future commercial needs. We may face significant or unforeseen difficulties in securing adequate supply of the COVID-19 diagnostic test, relating to the manufacturing of the test. These risks include but are not limited to:

- Technical issues relating to manufacturing components of the COVID-19 diagnostic test on a high-volume commercial scale at reasonable cost, and in a reasonable time frame;
- difficulty meeting demand or timing requirements for orders due to excessive costs or lack of capacity for part or all of an operation or process;
- changes in government regulations or in quality or other requirements that lead to additional manufacturing costs or an inability to supply product in a timely manner, if at all; and
- increases in raw material or component supply cost or an inability to obtain supplies of certain critical supplies needed to complete our manufacturing processes.

These and other difficulties may only become apparent when scaling up to the manufacturing process of the COVID-19 diagnostic test to a more substantive commercial scale. In the event the test cannot be manufactured in sufficient commercial quantities or manufacturing is delayed, our future prospects could be significantly impacted and our financial prospects could be materially harmed.

Our suppliers may experience development or manufacturing problems or delays that could limit the growth of our revenue or increase our losses.

We may encounter unforeseen situations in the manufacturing of the COVID-19 diagnostic test that could result in delays or shortfalls in our production. Suppliers may also face similar delays or shortfalls. In addition, suppliers' production processes may have to change to accommodate any significant future expansion of manufacturing capacity, which may increase suppliers' manufacturing costs, delay production of diagnostic tests, reduce our product gross margin and adversely impact our business. If we are unable to keep up with demand for the COVID-19 diagnostic test by successfully securing supply and shipping our diagnostic tests in a timely manner, our revenue could be impaired, market acceptance for the test could be adversely affected and our customers might instead purchase our competitors' diagnostic tests.

We have relied and expect to continue to rely on third parties to conduct studies of the COVID-19 diagnostic test that will be required by the FDA or other regulatory authorities and those third parties may not perform satisfactorily.

Although we intend to sell the COVID-19 IgG/IgM Rapid Test by virtue of recent FDA guidance allowing for reduced product clinical and analytical studies, we have relied on third parties, such as independent testing laboratories and hospitals, to conduct such studies. Our reliance on these third parties will reduce our control over these activities. These third-party contractors may not complete activities on schedule or conduct studies in accordance with regulatory requirements or our study design. We cannot control whether they devote sufficient time, skill and resources to our studies. Our reliance on third parties that we do not control will not relieve us of any applicable requirement to prepare, and ensure compliance with, various procedures required under good clinical practices. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our studies may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for additional diagnostic tests.

If the manufacturer's delivery of the COVID-19 tests and the required clinical data is delayed, then our ability to obtain necessary regulatory approvals and/or authorizations to the distribute the COVID-19 test will be impaired, which will adversely affect our business plans.

While the FDA has provided a path forward to begin selling the COVID-19 tests on an expedited basis, we are still required to provide the FDA with data concerning the validation of the tests and to satisfy certain labelling conditions. If the manufacturer is delayed in delivering to us the COVID-19 tests and related validation data, we will, in turn, be delayed in obtaining FDA approval and/or distribution authorization required before we can begin selling the COVID-19 tests. Any such delays will adversely affect our business plans.

We rely on a third party to manufacture the COVID-19 test for us and if such third party refuses or is unable to supply us with the COVID-19 test, our business will be materially harmed.

We rely on a third party to manufacture the COVID-19 diagnostic test, which manufacturer licenses its rights from the owner of the intellectual property underlying the COVID-19 test. If any issues arise with respect to the manufacturer's ability to manufacture and deliver to us the COVID-19 tests, our business could be materially harmed.

While we have obtained an exclusive distribution agreement for the right to commercialize the COVID-19 test in the United States, Canada and Mexico, the manufacturer has no obligation to supply us with a minimum amount of, or any, COVID-19 tests. The manufacturer may choose not to supply us with a sufficient quantity of such tests in order to supply such tests to other distributors, or for any reason. In addition, the manufacturer may be unable to provide us with an adequate supply of COVID-19 tests for various reasons, including, among others, if it becomes insolvent, if a United States regulatory authority or other governments block the import or sale of the COVID-19 tests, if it fails to maintain its rights to manufacture the COVID-19 test, or if the owner of the underlying intellectual property fails to adequately maintain such intellectual property.

If there is little or no demand for the COVID-19 test our business could be materially harmed.

While we have received a number of inquiries regarding the COVID-19 test and expect to receive orders upon our receipt of a supply of COVID-19 tests, there is no guarantee that such inquiries will result in customer orders. If no orders for the COVID-19 test are made, our business will be materially harmed.

The recent coronavirus (COVID-19) outbreak could adversely affect our financial condition and results of operation.

In December 2019, a novel strain of coronavirus (COVID-19) was reported to have surfaced in Wuhan, China. The impact of the outbreak of COVID-19 on the businesses and the economy in China and the rest of the world is unknown. If the impact is significant, the outbreak could impact our ability to implement logistic centers, develop business, conduct operations, and obtain components used in our products. The extent to which COVID-19 outbreak will impact business and the economy is highly uncertain and cannot be predicted. Accordingly, we cannot predict the extent to which our financial condition and results of operation will be affected.

Risks Related to our Bylaws

Our Amended and Restated Bylaws provides that the Court of Chancery of the State of Delaware is the exclusive forum for certain litigation that may be initiated by our stockholders, including claims under the Securities Act, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our Amended and Restated Bylaws provides that the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim for breach of a fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws or (iv) any action asserting a claim governed by the internal affairs doctrine. The choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and our directors, officers, employees and agents. Stockholders who do bring a claim in the Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near the State of Delaware. The Court of Chancery may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to us than to our stockholders. Alternatively, if a court were to find the choice of forum provision contained in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition. Notwithstanding the foregoing, the exclusive provision shall not preclude or contract the scope of exclusive federal or concurrent jurisdiction for actions brought under the Exchange Act, or the Securities Act of 1933, as amended, or the Securities Act, or the respective rules and regulations promulgated thereunder.

Risks Related to this Offering

Purchasers of common shares in this offering will experience immediate and substantial dilution in the book value of their investment.

The offering price per share of common stock in this offering is substantially higher than the net tangible book value per share of our common shares before giving effect to this offering. Accordingly, if you purchase common stock in this offering, you will incur immediate substantial dilution of approximately \$0.499 per common share, representing the difference between the offering price per share of common stock, and our as adjusted net tangible book value as of December 31, 2019 (after giving effect to the proceeds of the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering as if those actions had occurred as of December 31, 2019). Furthermore, if outstanding options or warrants are exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section in this prospectus supplement entitled "Dilution."

A substantial number of common shares may be sold in the market following this offering, which may depress the market price for our common shares.

Sales of a substantial number of common shares in the public market following this offering could cause the market price of our common shares to decline. A substantial majority of the outstanding common shares are, and the common shares offered hereby will be, freely tradable without restriction or further registration under the Securities Act.

You may experience future dilution as a result of future equity offerings and other issuances of our common shares or other securities. In addition, this offering and future equity offerings and other issuances of our common shares or other securities may adversely affect our common shares.

In order to raise additional capital, we may in the future offer additional common shares or other securities convertible into or exchangeable for common shares at prices that may not be the same as the price per share in this offering. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing shareholders. The price per share at which we sell additional shares of common stock or securities convertible into common stock in future transactions may be higher or lower than the price per share in this offering.

In addition, the sale of shares in this offering and any future sales of a substantial number of shares of common stock in the public market, or the perception that such sales may occur, could adversely affect the price of our common stock. We cannot predict the effect, if any, that market sales of those shares of common stock or the availability of those shares of common stock for sale will have on the market price of our common stock.

There is no public market for the Warrants and Placement Agent Warrants being offered in this offering.

There is no established public trading market for the Warrants and Placement Agent Warrants being offered in this offering, and we do not expect a market to develop. In addition, we do not intend to apply to list the Warrants and Placement Agent Warrants on any securities exchange or nationally recognized trading system, including the Nasdaq Capital Market. Without an active market, the liquidity of the Warrants and Placement Agent Warrants will be limited.

The Holder of Warrants and the Holders of the Placement Agent Warrants purchased or acquired in this offering will have no rights as a common shareholder until such holder exercises its Warrants and acquires our common shares.

Until a holder of Warrants or the Placement Agent Warrants acquires the common shares upon exercise of the Warrants or the Placement Agent Warrants, as applicable, a holder of Warrants or the Placement Agent Warrants will have no rights with respect to the shares of common stock underlying such Warrants or Placement Agent Warrants. Upon exercise of the Warrants or the Placement Agent Warrants, as applicable, the holder will be entitled to exercise the rights of a common stockholder only as to matters for which the record date occurs after the exercise date.

Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return.

Our management will have broad discretion over the use of proceeds from this offering. We will use the net proceeds from this offering primarily for working capital and general corporate purposes. Our management will have considerable discretion in the application of the net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used appropriately. We may use the net proceeds for corporate purposes that do not increase our operating results or enhance the value of our preferred stock. The failure of our management to use these funds effectively could have a material adverse effect on our business, cause the market price of our preferred stock to decline and potentially impair the operation and expansion of our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing instruments and U.S. government securities. These investments may not yield a favorable return to our stockholders.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference in this prospectus supplement and accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering contain “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, concerning our business, operations and financial performance and condition. In some cases, you can identify forward-looking statements by terminology such as “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “potential,” “positioned,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including without limitation the risks described in “Risk Factors” in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein. These risks are not exhaustive. Moreover, we operate in a very competitive and rapidly changing environment.

We believe that it is important to communicate our future expectations to our investors. However, there may be events in the future that we are not able to accurately predict or control and that may cause our actual results to differ materially from the expectations we describe in our forward-looking statements. These forward-looking statements are based on management’s current expectations, estimates, forecasts and projections about our business and the industry in which we operate and management’s beliefs and assumptions and are not guarantees of future performance or developments and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference in this prospectus supplement and accompanying prospectus, and any free writing prospectus that we have authorized for use in connection with this offering may turn out to be inaccurate. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the heading “Risk Factors” beginning on page S-7 of this prospectus supplement and elsewhere in the accompanying prospectus and those included in our Annual Report on Form 10-K for the fiscal year ended June 30, 2019 (as supplemented by our Quarterly Reports on form 10-Q) and other documents we periodically file with the SEC that are incorporated by reference in this prospectus supplement and accompanying prospectus. We urge you to consider these factors carefully in evaluating the forward-looking statements. We assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future, except as may be required under applicable law.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus supplement to conform these statements to actual results or to changes in our expectations.

You should read this prospectus supplement, the accompanying prospectus, the documents we have filed with the SEC that are incorporated by reference in this prospectus supplement and accompanying prospectus and any free writing prospectus that we have authorized for use in connection with this offering completely and with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

USE OF PROCEEDS

We estimate that the net proceeds from this offering, after deducting placement agent fees and estimated offering expenses payable by us, will be approximately \$18.1 million, excluding the proceeds, if any, from the exercise of the Warrants or the Placement Agent Warrants.

We have not allocated any specific portion of the net proceeds to any particular purpose, and our management will have the discretion to allocate the proceeds as it determines. Furthermore, the amount and timing of our actual expenditures will depend on numerous factors, including the cash used in or generated by our operations, the pace of the integration of acquired businesses, the level of our sales and marketing activities and the attractiveness of any additional acquisitions or investments. See "Risk Factors – Our management team may invest or spend the proceeds of this offering in ways with which you may not agree or in ways which may not yield a significant return." on page S-7.

DILUTION

If you invest in this offering, your ownership interest will be immediately diluted to the extent of the difference between the offering price per share of common stock and the as adjusted net tangible book value per share of common stock after this offering.

As of December 31, 2019 (after giving effect to the proceeds of the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering as if those actions had occurred as of December 31, 2019), we would have had a net tangible book value of \$48,503,190, or \$0.998 per share of common stock. Our net tangible book value per share of common stock represents total tangible assets less total liabilities, divided by the number of shares of common stock outstanding at December 31, 2019 (after giving effect to the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering as if those actions had occurred as of December 31, 2019) (48,609,139 shares of common stock would have been outstanding as of December 31, 2019 after giving effect to the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering as if those actions had occurred as of December 31, 2019).

After giving effect to the issuance and sale by us of 12,539,187 shares of common stock in this offering in the aggregate amount of \$20.0 million in this offering at an offering price of \$1.595 per share of common stock deducting placement agent fees, our as adjusted net tangible book value as of December 31, 2019 (after giving effect to the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering as if those actions had occurred as of December 31, 2019) would have been \$67,003,193.02, or approximately \$1.096 per share of common stock (assuming 61,148,326 shares of common stock outstanding as of December 31, 2019 after giving effect to, (i) the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering and (ii) the issuance of 12,539,187 shares of common stock in this offering). This amount represents an immediate increase in net tangible book value of \$0.098 per share of common stock to our existing shareholders and an immediate dilution in as adjusted net tangible book value of approximately \$0.499 per share of common stock to new investors purchasing securities of in this offering.

Dilution per share of common stock to new investors is determined by subtracting as adjusted net tangible book value per share of common stock after this offering from the offering price per share of common stock paid by new investors. The following table illustrates this dilution on a per share of common stock basis:

Offering price per share of common stock	\$	1.595
Net tangible book value per share of common stock as of December 31, 2019 (after giving effect to the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering as if those actions had occurred as of December 31, 2019)	\$	0.998
Increase in net tangible book value per share of common stock attributable to this offering		<u>0.098</u>
As adjusted net tangible book value per share of common stock after this offering	\$	<u>1.096</u>
Dilution per share of common stock to new investors participating in this offering	\$	<u>0.499</u>

Assuming the Warrants and Placement Agent Warrants were immediately exercised, this would result in an as adjusted net tangible book value as of December 31, 2019 of \$87,060,838.62 or approximately \$1.17 per share of common stock (assuming 74,502,560 shares of common stock outstanding as of December 31, 2019 after giving effect to, (i) to the issuance of shares of common stock and the exercise of a certain number of warrants issued in connection with the First RD Offering and the Second RD Offering, (ii) the issuance of 12,539,187 shares of common stock in this offering (ii) the exercise of the Warrants for 12,539,187 shares of common stock issued in this offering and (iii) the exercise of the Placement Agent Warrants for 815,047 shares of common stock issued in this offering), which represents an immediate dilution per share to new investors of \$0.425 per share of common stock, and an increase in net tangible book value per share to existing stockholders of \$0.172 per share of common stock.

The discussion of dilution, and the table quantifying it, assumes the sale of all shares covered by this prospectus supplement and no exercise of any outstanding options or warrants or other potentially dilutive securities. The exercise of potentially dilutive securities having an exercise price less than the offering price would increase the dilutive effect to new investors.

The above discussion and table are based on 20,733,052 shares of common stock outstanding as of December 31, 2019, which does not include the following:

- 1,482 common shares issuable upon the exercise of stock options outstanding as of December 31, 2019 at a weighted average exercise price of \$325.54 per share of common stock. As of March 10, 2020, there were 13,937 common shares issuable upon the exercise of stock options outstanding as of March 10, 2020 with a weighted exercise price of 34.69.
- 26,459,663 common shares issuable upon the exercise of warrants outstanding as of December 31, 2019, at a weighted average exercise price of \$2.92 per share of common stock, of which 17,030,191 remain outstanding at March 12, 2020 with a weighted average exercise price of \$3.76.
- an additional 403,209 common shares that are available for future issuance under our stock option plan, which was subsequently increased by 2,000,000 shares upon receiving shareholder approval on February 13, 2020.
- To the extent any of these outstanding options or warrants are exercised, there will be further dilution to new investors.
- 508,696 shares of common stock issuable upon the exercise of the warrants issued to H.C. Wainwright & Co., LLC or its assignees in connection with the First RD Offering on March 13, 2020.
- 12,075,000 shares of common stock issuable upon the exercise of warrants issued in connection with the Second RD Offering on March 13, 2020.
- 1,040,000 shares of common stock issuable upon the exercise of warrants issued to H.C. Wainwright & Co., LLC or its assignees in connection with the Second RD Offering on March 13, 2020.

DIVIDEND POLICY

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings to fund the development and expansion of our business and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination to declare and pay dividends will be made at the discretion of our board of directors and will depend on then-existing conditions, including our results of operations, financial condition, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

Common Stock

The material terms and provisions of our common stock are described under the heading "Description of Capital Stock" in the accompanying prospectus.

Warrants

The following is a summary of the material terms and provisions of the Warrants that are being offered hereby. This summary is subject to and qualified in its entirety by the form of Warrants, which has been provided to the investors in this offering and which has been filed with the U.S. Securities and Exchange Commission, or SEC, as an exhibit to a Current Report on Form 8-K in connection with this offering and incorporated by reference into the registration statement of which this prospectus forms a part. Prospective investors should carefully review the terms and provisions of the form of warrant for a complete description of the terms and conditions of the Warrants.

Duration and Exercise Price

The Warrants offered hereby will have an exercise price of \$1.47 per share. The Warrants will be immediately exercisable and will have a term of one year from the issuance date. The exercise prices and numbers of shares of common stock issuable upon exercise are subject to appropriate adjustment in the event of stock dividends, stock splits, reorganizations or similar events affecting our common stock. Warrants will be issued in certificated form only.

Exercisability

The Warrants will be exercisable, at the option of each holder, in whole or in part, by delivering to us a duly executed exercise notice accompanied by payment in full for the number of shares of our common stock purchased upon such exercise (except in the case of a cashless exercise as discussed below). A holder (together with its affiliates) may not exercise any portion of such holder's warrants to the extent that the holder would own more than 4.99% (or 9.99%, at the holder's election) of our outstanding common stock immediately after exercise, except that upon at least 61 days' prior notice from the holder to us, the holder may increase the amount of ownership of outstanding stock after exercising the holder's Warrants up to 9.99% of the number of shares of our common stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Warrants. Purchasers in this offering may also elect prior to the issuance of Warrants to have the initial exercise limitation set at 9.99% of our outstanding common stock. Further, such Warrants may not be exercised to the extent that such exercise would result in a holder and its affiliates beneficially owning more than 19.99% of the outstanding common stock or outstanding voting power of the Company (including shares of common stock issuable upon exercise of the warrants held by them).

Cashless Exercise

In lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the warrant.

Cashless Exercise

If, at the time a holder exercises its warrants, a registration statement registering the issuance of the shares of common stock underlying the warrants under the Securities Act of 1933, as amended, or the Securities Act, is not then effective or available for the issuance of such shares, then in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, the holder may elect instead to receive upon such exercise (either in whole or in part) the net number of shares of common stock determined according to a formula set forth in the warrant.

Transferability

A Warrant may be transferred at the option of the holder upon surrender of the Warrant to us together with the appropriate instruments of transfer.

Fractional Shares

No fractional shares of common stock will be issued upon the exercise of the Warrants. Rather, the number of shares of common stock to be issued will, at our election, either be rounded up to the nearest whole number or we will pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the exercise price.

Trading Market

There is no established trading market for any of the Warrants, and we do not expect a market to develop. We do not intend to apply for a listing for any of the warrants on any securities exchange or other nationally recognized trading system. Without an active trading market, the liquidity of the Warrants will be limited.

Rights as a Stockholder

Except as otherwise provided in the Warrants or by virtue of the holders' ownership of shares of our common stock, the holders of Warrants do not have the rights or privileges of holders of our common stock, including any voting rights, until such Warrant holders exercise their warrants.

Waivers and Amendments

No term of the Warrants may be amended or waived without the written consent of the holder of such warrant.

Placement Agent Warrants

We have also agreed to issue to the placement agent the Placement Agent Warrants to purchase up to 815,047 shares of common stock. The Placement Agent Warrants will have substantially the same terms as the Warrants described above, except that the Placement Agent Warrants will have an exercise price will have an exercise price of \$1.9938 per share (which represents 125% of the offering price per share sold in this offering).

CERTAIN MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following discussion describes certain material U.S. federal income tax consequences of the acquisition, ownership and disposition of our common stock and Warrants acquired in this offering. This discussion is based on the current provisions of the Internal Revenue Code of 1986, as amended (referred to as the "Code"), existing and proposed U.S. Treasury regulations promulgated thereunder, and administrative rulings and court decisions in effect as of the date hereof, all of which are subject to change at any time, possibly with retroactive effect. No ruling has been or will be sought from the Internal Revenue Service, or IRS, with respect to the matters discussed below, and there can be no assurance the IRS will not take a contrary position regarding the tax consequences of the acquisition, ownership or disposition of our common stock or Warrants, or that any such contrary position would not be sustained by a court.

We assume in this discussion that the shares of our common stock and Warrants will be held as capital assets (generally, property held for investment). This discussion does not address all aspects of U.S. federal income taxes, does not discuss the potential application of the tax on net investment income, the alternative minimum tax and does not address state or local taxes, U.S. federal gift and estate tax laws, except as specifically provided below with respect to non-U.S. holders, or any non-U.S. tax consequences that may be relevant to holders in light of their particular circumstances. This discussion also does not address the special tax rules applicable to particular holders, such as:

- financial institutions;
- brokers or dealers in securities;
- tax-exempt organizations;
- pension plans;
- regulated investment companies;
- owners that hold our common stock or Warrants as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- insurance companies;
- controlled foreign corporations, passive foreign investment companies, or corporations that accumulate earnings to avoid U.S. federal income tax; and
- certain U.S. expatriates.

In addition, this discussion does not address the tax treatment of partnerships or other pass-through entities or persons who hold our common stock or Warrants through partnerships or other entities which are pass-through entities for U.S. federal income tax purposes. A partner in a partnership or other pass-through entity that will hold our common stock or Warrants should consult his, her or its own tax advisor regarding the tax consequences of the ownership and disposition of our common stock or Warrants through a partnership or other pass-through entity, as applicable.

This discussion of U.S. federal income tax considerations is for information purposes only and is not tax advice. Prospective investors should consult their own tax advisors regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of acquiring, holding and disposing of our common stock and Warrants.

For the purposes of this discussion, a “U.S. Holder” means a beneficial owner (other than a partnership or other pass-through entity) of our common stock or Warrants that is for U.S. federal income tax purposes (a) an individual citizen or resident of the United States, (b) a corporation (or other entity taxable as a corporation for U.S. federal income tax purposes), created or organized in or under the laws of the United States, any state thereof or the District of Columbia, (c) an estate the income of which is subject to U.S. federal income taxation regardless of its source, or (d) a trust if it (1) is subject to the primary supervision of a court within the United States and one or more U.S. persons (within the meaning of Section 7701(a)(30) of the Code) have the authority to control all substantial decisions of the trust or (2) has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person. A “Non-U.S. Holder” is, for U.S. federal income tax purposes, a beneficial owner of common stock or Warrants that is not a U.S. Holder or a partnership for U.S. federal income tax purposes.

Allocation of Purchase Price to Warrants

For U.S. federal income tax purposes, a holder’s acquisition of both common stock and Warrants should be treated as the acquisition of an “investment unit” consisting of one share of common stock and one Warrant. The purchase price for each investment unit will be allocated between these two components in proportion to their relative fair market values at the time the unit is purchased by the holder. This allocation of the purchase price for each unit will establish the holder’s initial tax basis for U.S. federal income tax purposes in the common stock and Warrant, as applicable. The separation of the share of common stock and the warrant included in each unit should not be a taxable event for U.S. federal income tax purposes. Each holder should consult his, her or its own tax advisor regarding the allocation of the purchase price for a unit.

Tax Considerations Applicable to U.S. Holders

Distributions

As discussed above, we currently anticipate that we will retain future earnings for the development, operation, and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In the event that we do make distributions on our common stock to a U.S. Holder, those distributions generally will constitute dividends for U.S. tax purposes to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Distributions in excess of our current and accumulated earnings and profits will constitute a return of capital that is applied against and reduces, but not below zero, a U.S. Holder’s adjusted tax basis in our common stock. Any remaining excess will be treated as gain realized on the sale or exchange of our common stock as described below under the section titled “—Disposition of Our Common Stock or Warrants.”

Disposition of Our Common Stock or Warrants

Upon a sale or other taxable disposition of our common stock or Warrants, a U.S. Holder generally will recognize capital gain or loss in an amount equal to the difference between the amount realized and the U.S. Holder's adjusted tax basis in the common stock or Warrants. Capital gain or loss will constitute long-term capital gain or loss if the U.S. Holder's holding period for the common stock or Warrants exceeds one year. The deductibility of capital losses is subject to certain limitations. U.S. Holders who recognize losses with respect to a disposition of our common stock or Warrants should consult their own tax advisors regarding the tax treatment of such losses.

Exercise or Lapse of Warrants

Upon the exercise of a Warrant, a U.S. Holder will not recognize gain or loss and will have a tax basis in the common stock received equal to the U.S. Holder's tax basis in the Warrant plus the exercise price of the Warrant. The holding period for the common stock received pursuant to the exercise of a Warrant will begin on the date following the date of exercise (or possibly the date of exercise) and will not include the period during which the U.S. Holder held the Warrant. If a Warrant is allowed to lapse unexercised, a U.S. Holder will recognize a capital loss in an amount equal to its tax basis in the Warrant. Such loss will be long-term capital loss if the Warrant has been held for more than one year as of the date the Warrant lapsed. The deductibility of capital losses is subject to certain limitations.

Information Reporting and Backup Withholding

Information reporting requirements generally will apply to payments of dividends (including constructive dividends) on the common stock and to the proceeds of a sale or other disposition of common stock and Warrants paid by us to a U.S. Holder unless such U.S. Holder is an exempt recipient, such as a corporation. Backup withholding will apply to those payments if the U.S. Holder fails to provide the holder's taxpayer identification number, or certification of exempt status, or if the holder otherwise fails to comply with applicable requirements to establish an exemption. Backup withholding is not an additional tax. Rather, any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against the U.S. Holder's U.S. federal income tax liability provided the required information is timely furnished to the IRS.

Tax Considerations Applicable To Non-U.S. Holders

Distributions

As discussed above, we currently anticipate that we will retain future earnings for the development, operation, and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In the event that we do make distributions on our common stock to a Non-U.S. Holder, those distributions generally will constitute dividends for U.S. federal income tax purposes as described in "—U.S. Holders—Distributions".

Any distribution (including constructive distributions) on our common stock that is treated as a dividend paid to a Non-U.S. Holder that is not effectively connected with the holder's conduct of a trade or business in the United States will generally be subject to withholding tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and the Non-U.S. Holder's country of residence. To obtain a reduced rate of withholding under a treaty, a Non-U.S. Holder generally will be required to provide the applicable withholding agent with a properly executed IRS Form W-8BEN, IRS Form W-8BEN-E or other appropriate form, certifying the Non-U.S. Holder's entitlement to benefits under that treaty. Non-U.S. Holders should consult their own tax advisors regarding their entitlement to benefits under a relevant income tax treaty and the specific methods available to them to satisfy these requirements.

We generally are not required to withhold tax on dividends paid (or constructive dividends deemed paid) to a Non-U.S. Holder that are effectively connected with the holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment or fixed base that the holder maintains in the United States) if a properly executed IRS Form W-8ECI, stating that the dividends are so connected, is furnished to us or the applicable withholding agent. In general, such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular graduated rates applicable to U.S. persons. A corporate Non-U.S. Holder receiving effectively connected dividends may also be subject to an additional "branch profits tax," which is imposed, under certain circumstances, at a rate of 30% (or such lower rate as may be specified by an applicable treaty) on the corporate Non-U.S. Holder's effectively connected earnings and profits, subject to certain adjustments.

See also the sections below titled "—Information Reporting and Backup Withholding" and "—Foreign Accounts" for additional withholding rules that may apply to dividends paid to certain foreign financial institutions or non-financial foreign entities.

Disposition of Our Common Stock or Warrants

Subject to the discussions below under the sections titled “—Information Reporting and Backup Withholding” and “—Foreign Accounts,” a Non-U.S. Holder generally will not be subject to U.S. federal income or withholding tax with respect to gain realized on a sale or other disposition of our common stock or Warrants unless:

- the gain is effectively connected with the Non-U.S. Holder’s conduct of a trade or business in the United States, and if an applicable income tax treaty so provides, the gain is attributable to a permanent establishment or fixed base maintained by the Non-U.S. Holder in the United States; in these cases, the Non-U.S. Holder will be taxed on a net income basis at the regular graduated rates and in the manner applicable to U.S. persons, and if the Non-U.S. Holder is a corporation, an additional branch profits tax at a rate of 30%, or a lower rate as may be specified by an applicable income tax treaty, may also apply;
- the Non-U.S. Holder is a nonresident alien present in the United States for 183 days or more in the taxable year of the disposition and certain other requirements are met, in which case the Non-U.S. Holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence) on the net gain derived from the disposition, which may be offset by certain U.S.-source capital losses of the Non-U.S. Holder, if any; or
- we are, or have been at any time during the five-year period preceding such disposition (or the Non-U.S. Holder’s holding period of the common stock or Warrants, if shorter), a “U.S. real property holding corporation,” unless our common stock is regularly traded on an established securities market and the Non-U.S. Holder held no more than 5% of our outstanding common stock, directly or indirectly, during the shorter of the five-year period ending on the date of the disposition or the period that the Non-U.S. Holder held our common stock. Special rules may apply to the determination of the 5% threshold in the case of a holder of a Warrant or common stock warrant. Non-U.S. Holders are urged to consult their own tax advisors regarding the effect of holding our Warrants on the calculation of such 5% threshold. Generally, a corporation is a “U.S. real property holding corporation” if the fair market value of its “U.S. real property interests” (as defined in the Code and applicable regulations) equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we believe that we are not currently, and we do not anticipate becoming, a “U.S. real property holding corporation” for U.S. federal income tax purposes. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

See the sections titled “—Information Reporting and Backup Withholding” and “—Foreign Accounts” below for additional information regarding withholding rules that may apply to proceeds of a disposition of our common stock or Warrants paid to foreign financial institutions or non-financial foreign entities.

Federal Estate Tax

Common stock or Warrants owned or treated as owned by an individual who is a Non-U.S. Holder (as specially defined for U.S. federal estate tax purposes) at the time of death will be included in the individual’s gross estate for U.S. federal estate tax purposes and, therefore, may be subject to U.S. federal estate tax, unless an applicable estate tax or other treaty provides otherwise.

Information Reporting and Backup Withholding

We must report annually to the IRS and to each Non-U.S. Holder the gross amount of the distributions (including constructive distributions) on our common stock or Warrants paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. Holders may have to comply with specific certification procedures to establish that the holder is not a U.S. person (as defined in the Code) in order to avoid backup withholding at the applicable rate, currently 24%, with respect to dividends (including constructive dividends) on our common stock or Warrants. Generally, a holder will comply with such procedures if it provides a properly executed IRS Form W-8BEN (or other applicable Form W-8) or otherwise meets documentary evidence requirements for establishing that it is a Non-U.S. Holder, or otherwise establishes an exemption. Dividends paid to Non-U.S. Holders subject to withholding of U.S. federal income tax, as described above under the heading “Distributions,” will generally be exempt from U.S. backup withholding.

Information reporting and backup withholding generally will apply to the proceeds of a disposition of our common stock or Warrants by a Non-U.S. Holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a Non-U.S. Holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a Non-U.S. Holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. Holders should consult their own tax advisors regarding the application of the information reporting and backup withholding rules to them.

Copies of information returns may be made available to the tax authorities of the country in which the Non-U.S. Holder resides or is incorporated under the provisions of a specific treaty or agreement.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a Non-U.S. Holder can be refunded or credited against the Non-U.S. Holder's U.S. federal income tax liability, if any, provided that an appropriate claim is timely filed with the IRS.

Foreign Accounts

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a 30% withholding tax on dividends on common stock and Warrants if paid to a non-U.S. entity unless (i) if the non-U.S. entity is a "foreign financial institution," the non-U.S. entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the non-U.S. entity is not a "foreign financial institution," the non-U.S. entity identifies certain of its U.S. investors, if any, or (iii) the non-U.S. entity is otherwise exempt under FATCA.

While withholding under FATCA may apply to payments of gross proceeds from a sale or other disposition of our common stock or Warrants, under proposed U.S. Treasury Regulations, withholding on payments of gross proceeds is not required. Although such regulations are not final, applicable withholding agents may rely on the proposed regulations until final regulations are issued.

An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain circumstances, a holder may be eligible for refunds or credits of the tax. Holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our common stock or Warrants.

THE PRECEDING DISCUSSION OF MATERIAL U.S. FEDERAL TAX CONSIDERATIONS IS FOR INFORMATION PURPOSES ONLY. IT IS NOT TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL, STATE, LOCAL AND NON-U.S. TAX CONSEQUENCES OF PURCHASING, HOLDING AND DISPOSING OF OUR COMMON STOCK AND/OR WARRANTS, INCLUDING THE CONSEQUENCES OF ANY PROPOSED CHANGES IN APPLICABLE LAWS.

PLAN OF DISTRIBUTION

Pursuant to a letter agreement dated as of January 3, 2020, as amended, we have retained H.C. Wainwright & Co., LLC, or Wainwright, to act as our exclusive placement agent in connection with this offering. Under the terms of the engagement letter, Wainwright is not purchasing the securities offered by us in this offering, and is not required to sell any specific number or dollar amount of securities. The terms of this offering were subject to market conditions and negotiations between us, Wainwright and the prospective investor.

Wainwright proposes to arrange for the sale of the shares and the Warrants we are offering pursuant to this prospectus supplement and accompanying prospectus to several investors through securities purchase agreement directly between such investors and us. We will only sell to investors who have entered into securities purchase agreements with us.

Wainwright will have no authority to bind us by virtue of the engagement letter. Further, Wainwright does not guarantee that it will be able to raise new capital in any prospective offering. Wainwright may engage sub-agents or selected dealers to assist with this offering. We may not sell the entire amount of the securities being offered pursuant to this prospectus supplement.

Delivery of the securities offered hereby is expected to occur on or about March 23, 2020, subject to satisfaction of certain conditions.

We have agreed to pay Wainwright a cash fee equal to 7.5% of the gross proceeds received from the investors who purchased securities in the offering. We have also agreed to reimburse Wainwright \$200,000 for management fees (which represent 1.0% of the gross proceeds we expect to receive), \$90,000 for non-accountable expenses and up to \$12,900 for clearing expenses. We estimate the total offering expenses of this offering that will be payable by us, excluding the placement agent's fees and expenses, will be approximately \$0.2 million.

In addition, we have agreed to issue to the placement agent (or their designees) the Placement Agent Warrants to purchase up to 815,047 shares of common stock, which represents 6.5% of the aggregate number of securities stock sold in this offering. The Placement Agent Warrants will be exercisable for one year from the effective date of this offering and will have an exercise price of \$1.9938 per share, which represents 125% of the offering price per share and accompanying Warrant sold in this offering. Pursuant to FINRA Rule 5110(g), the Placement Agent Warrants and any shares issued upon exercise of the Placement Agent Warrants shall not be sold, transferred, assigned, pledged, or hypothecated, or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the securities by any person for a period of 180 days immediately following the date of effectiveness or commencement of sales of this offering, except the transfer of any security: (i) by operation of law or by reason of our reorganization; (ii) to any FINRA member firm participating in this offering and the officers or partners thereof, if all securities so transferred remain subject to the lock-up restriction set forth above for the remainder of the time period; (iii) if the aggregate amount of our securities held by the placement agent or related persons do not exceed 1% of the securities being offered; (iv) that is beneficially owned on a pro-rata basis by all equity owners of an investment fund, provided that no participating member manages or otherwise directs investments by the fund and the participating members in the aggregate do not own more than 10% of the equity in the fund; or (v) the exercise or conversion of any security, if all securities remain subject to the lock-up restriction set forth above for the remainder of the time period.

We have agreed to indemnify Wainwright and specified other persons against certain liabilities relating to or arising out of Wainwright's activities under the engagement letter and to contribute to payments that Wainwright may be required to make in respect of such liabilities.

Wainwright may be deemed to be an underwriter within the meaning of Section 2(a)(11) of the Securities Act, and any commissions received by it and any profit realized on the resale of the securities sold by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. As an underwriter, Wainwright would be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 415(a)(4) under the Securities Act and Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of common shares by Wainwright acting as principal. Under these rules and regulations, Wainwright:

- may not engage in any stabilization activity in connection with our securities; and
- may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities, other than as permitted under the Exchange Act, until it has completed its participation in the distribution.

The securities purchase agreement is included as an exhibit to a Current Report on Form 8-K that we have filed with the SEC and that is incorporated by reference into the registration statement of which this prospectus supplement forms a part.

From time to time, Wainwright may provide in the future various advisory, investment and commercial banking and other services to us in the ordinary course of business, for which they have received and may continue to receive customary fees and commissions. Wainwright acted as our placement agent for the registered direct offering we announced on March 11, 2020, for which it received compensation. However, except as disclosed in this prospectus supplement, we have no present arrangements with Wainwright for any further services.

LEGAL MATTERS

The validity of the securities offered by this prospectus supplement and accompanying prospectus will be passed upon by Dorsey & Whitney LLP, Salt Lake City, Utah.

EXPERTS

The consolidated financial statements of Aytu BioScience, Inc. at June 30, 2019 and 2018, and for each of the two years in the period ended June 30, 2019 have been audited by Plante & Moran, PLLC (successor to EKS&H LLLP), independent registered public accounting firm. Such financial statements have been incorporated herein by reference in reliance on the report of such firm given upon their authority as experts in accounting and auditing.

The abbreviated financial statements of the Pediatrics Product Portfolio of Cerecor Inc. at September 30, 2019 and December 31, 2018, and for the nine-month period ended September 30, 2019 and for the year ended December 31, 2018, incorporated by reference in Aytu BioScience, Inc.'s Current Report on Form 8-K/A dated January 10, 2020 have been audited by Ernst & Young LLP, independent auditors, as set forth in their report thereon incorporated by reference therein, and incorporated herein by reference. Such abbreviated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

The financial statements of Innovus incorporated by reference in Aytu BioScience Inc.'s Current Report on Form 8-K dated February 14, 2020 have been audited by Hall & Company, an independent registered public accounting firm, as stated in their reports. Such financial statements have been incorporated by reference in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public at the SEC's website at <http://www.sec.gov>. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge on our website, www.aytubio.com. We have not incorporated by reference into this prospectus supplement or the accompanying prospectus the information on our website, and you should not consider it to be a part of this prospectus supplement or the accompanying prospectus. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the exhibits attached thereto, contains additional relevant information about us and the securities. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement from the SEC's website at <http://www.sec.gov>. The registration statement and the documents referred to below under "Information Incorporated by Reference" are also available on our website, www.aytubio.com. We have not incorporated by reference into this prospectus supplement or the accompanying prospectus the information on our website, and you should not consider it to be a part of this prospectus supplement or the accompanying prospectus.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement and the accompanying prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus supplement and the accompanying prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus supplement and the accompanying prospectus. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- our Definitive Proxy Statement on [Schedule 14A](#) filed with the SEC on December 23, 2019;
- our Annual Report on [Form 10-K](#) for the fiscal year ended June 30, 2019;
- our Quarterly Report on Form 10-Q for the quarters ended [September 30, 2019](#) and [December 31, 2019](#);
- our Current Reports on Form 8-K filed with the SEC on [August 2, 2019](#), [September 18, 2019](#), [October 15, 2019](#), on [October 15, 2019](#) (as amended and filed with the SEC on [January 10, 2020](#)), [November 4, 2019](#) (as amended and filed with the SEC on [November 4, 2019](#), [November 7, 2019](#)), [November 12, 2019](#), [November 26, 2019](#), [December 2, 2019](#), [December 11, 2019](#), [January 15, 2020](#), [January 24, 2020](#), [February 13, 2020](#), [February 14, 2020](#) (as amended on [February 26, 2020](#)), [February 21, 2020](#) and [March 13, 2020](#); and
- the description of our Common Stock contained in our Registration Statement on Form 8-A, as filed with the SEC on [October 17, 2017](#), including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference any future filings (other than Current Reports furnished under Items 2.02 or 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial registration statement and prior to effectiveness of the registration statement, excluding, in each case, information deemed furnished and not filed.

Any statements contained in a previously filed document incorporated by reference into this prospectus supplement and the accompanying prospectus is deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained in this prospectus supplement and the accompanying prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

This prospectus supplement and the accompanying prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus supplement and the accompanying prospectus. You should rely only on the information incorporated by reference or provided in this prospectus supplement and the accompanying prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date of this prospectus supplement or the accompanying prospectus or the date of the documents incorporated by reference in this prospectus supplement and the accompanying prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus supplement and the accompanying prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus supplement and the accompanying prospectus.

Requests for such documents should be directed to:

Aytu BioScience, Inc.
373 Inverness Parkway, Suite 206
Englewood, Colorado 80112
Attention: Corporate Secretary
Phone: (720) 437-6580

You may also access the documents incorporated by reference in this prospectus supplement and accompanying prospectus, at no cost to you, through our website at www.aytubio.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus supplement and accompanying prospectus or the registration statement of which they form a part.

PROSPECTUS

\$100,000,000



Common Stock
Preferred Stock
Warrants
Units

We may from time to time, in one or more offerings at prices and on terms that we will determine at the time of each offering, sell common stock, preferred stock, warrants, or a combination of these securities, or units, for an aggregate initial offering price of up to \$100,000,000. This prospectus describes the general manner in which our securities may be offered using this prospectus. Each time we offer and sell securities, we will provide you with a prospectus supplement that will contain specific information about the terms of that offering. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby.

This prospectus may not be used to offer and sell securities unless accompanied by a prospectus supplement.

Our common stock is currently traded on the NASDAQ Capital Market under the symbol "AYTU." On November 21, 2017, the last reported sales price for our common stock was \$2.60 per share. We will apply to list any shares of common stock sold by us under this prospectus and any prospectus supplement on the NASDAQ Capital Market. The prospectus supplement will contain information, where applicable, as to any other listing of the securities on the NASDAQ Capital Market or any other securities market or exchange covered by the prospectus supplement.

The securities offered by this prospectus involve a high degree of risk. See "Risk Factors" beginning on page 7, in addition to Risk Factors contained in the applicable prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

We may offer the securities directly or through agent or to or through underwriters or dealers. If any agent or underwriters are involved in the sale of the securities their names, and any applicable purchase price, fee, commission or discount arrangement between or among them, will be set forth, or will be calculable from the information set forth, in an accompanying prospectus supplement. We can sell the securities through agent, underwriters or dealers only with delivery of a prospectus supplement describing the method and terms of the offering of such securities. See "Plan of Distribution."

This prospectus is dated December 1, 2017

Table of Contents

	<u>Page</u>
ABOUT THIS PROSPECTUS	1
CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS	1
ABOUT AYTU BIOSCIENCE, INC.	2
RISK FACTORS	6
USE OF PROCEEDS	6
DESCRIPTION OF CAPITAL STOCK	7
DESCRIPTION OF WARRANTS	8
DESCRIPTION OF UNITS	9
PLAN OF DISTRIBUTION	9
LEGAL MATTERS	11
EXPERTS	11
WHERE YOU CAN FIND MORE INFORMATION	11
INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE	12

You should rely only on the information contained or incorporated by reference in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference into this prospectus. If any person does provide you with information that differs from what is contained or incorporated by reference in this prospectus, you should not rely on it. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You should assume that the information contained in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information contained in any document we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any prospectus supplement or any sale of a security. These documents are not an offer to sell or a solicitation of an offer to buy these securities in any circumstances under which the offer or solicitation is unlawful.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a “shelf” registration process. Under this shelf registration process, we may sell any combination of the securities described in this prospectus in one or more offerings up to a total dollar amount of proceeds of \$100,000,000. This prospectus describes the general manner in which our securities may be offered by this prospectus. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus or in documents incorporated by reference in this prospectus. The prospectus supplement that contains specific information about the terms of the securities being offered may also include a discussion of certain U.S. Federal income tax consequences and any risk factors or other special considerations applicable to those securities. To the extent that any statement that we make in a prospectus supplement is inconsistent with statements made in this prospectus or in documents incorporated by reference in this prospectus, you should rely on the information in the prospectus supplement. You should carefully read both this prospectus and any prospectus supplement together with the additional information described under “Where You Can Find More Information” before buying any securities in this offering.

Unless the context otherwise requires, references to “we,” “our,” “us,” “Aytu BioScience” or the “Company” in this prospectus mean Aytu BioScience, Inc., a Delaware corporation.

We own or have rights to various U.S. federal trademark registrations and applications, and unregistered trademarks and servicemarks, including Fiera, Natesto, ProstaScint, MiOXSYS, RedoxSYS, Luoxis, Vyrix and Nuelle. All other trade names, trademarks and service marks appearing in this prospectus are the property of their respective owners. We have assumed that the reader understands that all such terms are source-indicating. Accordingly, such terms, when first mentioned in this prospectus, appear with the trade name, trademark or service mark notice and then throughout the remainder of this prospectus without trade name, trademark or service mark notices for convenience only and should not be construed as being used in a descriptive or generic sense.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents and information incorporated by reference in this prospectus include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are based on our management’s beliefs and assumptions and on information currently available to our management. Such forward-looking statements include those that express plans, anticipation, intent, contingency, goals, targets or future development and/or otherwise are not statements of historical fact.

All statements in this prospectus and the documents and information incorporated by reference in this prospectus that are not historical facts are forward-looking statements. We may, in some cases, use terms such as “anticipates,” “believes,” “could,” “estimates,” “expects,” “intends,” “may,” “plans,” “potential,” “predicts,” “projects,” “should,” “will,” “would” or similar expressions or the negative of such items that convey uncertainty of future events or outcomes to identify forward-looking statements.

Forward-looking statements are made based on management’s beliefs, estimates and opinions on the date the statements are made and we undertake no obligation to update forward-looking statements if these beliefs, estimates and opinions or other circumstances should change, except as may be required by applicable law. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements.

PROSPECTUS SUMMARY

This summary highlights certain information about us and this offering contained elsewhere in this prospectus. Because it is only a summary, it does not contain all of the information that you should consider before investing in shares of our common stock and it is qualified in its entirety by, and should be read in conjunction with, the more detailed information appearing elsewhere in this prospectus. Before you decide to invest in our common stock, you should read the entire prospectus carefully, including "Risk Factors" beginning on page 7, and the financial statements and related notes included in this prospectus.

ABOUT AYTU BIOSCIENCE, INC.

Overview

We are a commercial-stage specialty healthcare company focused on acquiring, developing and commercializing novel products in the field of urology. We have multiple urology-focused products on the market, and we seek to build a portfolio of novel therapeutics that serve large medical needs in the field of urology. We are concentrating on hypogonadism, prostate cancer, male infertility and, recently, female sexual wellbeing and intimacy and plan to expand into other urological indications for which we believe there are significant medical needs.

We acquired exclusive U.S. rights to Natesto[®] (testosterone) nasal gel, a novel formulation of testosterone delivered via a discreet, easy-to-use nasal gel, and we launched Natesto in the United States with our direct sales force in late summer 2016. Natesto is approved by the U.S. Food and Drug Administration, or FDA, for the treatment of hypogonadism (low testosterone) in men and is the only testosterone replacement therapy, or TRT, delivered via a nasal gel. Natesto offers multiple advantages over currently available TRTs and competes in a \$2.0 billion market. Importantly, as Natesto is delivered via the nasal mucosa and not the skin, there is no risk of testosterone transference to others, a known potential side effect and black box warning associated with all other topically applied TRTs, including the market leader AndroGel[®].

Outside the U.S. we market MiOXSYS[®], a novel *in vitro* diagnostic device that is currently CE marked (which generally enables it to be sold within the European Economic Area) and for which we intend to initiate a final clinical study to enable FDA clearance in the U.S. Our MiOXSYS system is a novel, point-of-care semen analysis system with the potential to become a standard of care in the diagnosis and management of male infertility. Male infertility is a prevalent and underserved condition and oxidative stress is widely implicated in its pathophysiology. MiOXSYS was developed from our core oxidation-reduction potential research platform known as RedoxSYS[®]. We are advancing MiOXSYS toward FDA clearance.

We currently market ProstaScint[®] (capromab pendetide), the only radioimaging agent indicated to detect the prostate specific membrane antigen, or PSMA, in the assessment and staging of prostate cancer. ProstaScint is approved by the FDA for use in both newly diagnosed, high-risk prostate cancer patients and patients with recurrent prostate cancer.

On May 5, 2017, we acquired Nuelle, Inc. or Nuelle, a women's sexual health company. This transaction expanded our product portfolio with the addition of the Fiera[®] personal care device for women. Fiera was recently launched in the U.S. and is a proprietary, revenue-generating product scientifically proven to enhance physical arousal and sexual desire in the millions of adult women around the world impacted by changes in sexual desire. This acquisition adds a novel, commercial-stage product in a complementary adjacency readily accessible by our U.S.-based commercial infrastructure. Nuelle was previously a portfolio company of leading venture capital firm New Enterprise Associates.

In the future we will look to acquire additional urology products, including existing products we believe can offer distinct commercial advantages. Our management team's prior experience has involved identifying clinical assets that can be re-launched to increase value, with a focused commercial infrastructure specializing in urology.

Natesto® (testosterone) nasal gel.

On April 22, 2016, we entered into an agreement to acquire the exclusive U.S. rights to Natesto (testosterone) nasal gel from Acerus Pharmaceuticals Corporation, or Acerus, which rights we acquired on July 1, 2016. Natesto is a patented, FDA-approved testosterone replacement therapy, or TRT, and is the only nasally-administered formulation of testosterone available in the United States. Natesto is a discreet, easy-to-administer nasal gel that may be appropriate for men with active lifestyles as Natesto is small, portable, Transportation Security Administration, or TSA-compliant, and easy to use. Importantly, Natesto is not applied directly to the patient's skin as other topically applied TRTs are. Rather, it is delivered directly into the nasal mucosa via a proprietary nasal applicator. Thus, Natesto does not carry a black box warning related to testosterone transference to a man's female partner or children — as other topically (primarily gels and solutions) administered TRTs do by virtue of their delivery directly onto the skin. We launched Natesto in the U.S. in late summer 2016 with our direct sales force, and we are positioning Natesto as the ideal treatment solution for men with active, busy lifestyles who suffer from hypogonadism.

MiOXSYS®.

MiOXSYS is a rapid *in vitro* diagnostic semen analysis test used in the quantitative measurement of static oxidation-reduction potential, or sORP, in human semen. MiOXSYS is a CE marked system and is an accurate, easy to use, and fast infertility assessment tool. It is estimated that 72.4 million couples worldwide experience infertility problems. In the United States, approximately 10% of couples are defined as infertile. Male infertility is responsible for between 40 – 50% of all infertility cases and affects approximately 7% of all men. Male infertility is often unexplained (idiopathic), and this idiopathic infertility is frequently associated with increased levels of oxidative stress in the semen. As such, having a rapid, easy-to-use diagnostic platform to measure oxidative stress should provide a practical way for male infertility specialists to improve semen analysis and infertility assessments without having to refer patients to outside clinical laboratories.

Male infertility is prevalent and underserved, and oxidative stress is widely implicated in its pathophysiology. The global male infertility market is expected to grow to over \$300 million by 2020 with a CAGR of nearly 5% from 2014 to 2020. Oxidative stress is broadly implicated in the pathophysiology of idiopathic male infertility, yet very few diagnostic tools exist to effectively measure oxidative stress levels in men. However, antioxidants are widely available and recommended to infertile men. With the introduction of the MiOXSYS System, we believe for the first time there will be an easy and effective diagnostic tool to assess the degree of oxidative stress and potentially enable the monitoring of patients' responses to antioxidant therapy as a treatment regimen for infertility. The MiOXSYS System received CE marking in Europe in January 2016 and obtained Health Canada Class II Medical Device approval in March 2016. We expect to advance MiOXSYS into clinical trials in the United States in order to enable 510k clearance.

ProstaScint® (capromab pendetide).

We became a commercial stage company by virtue of our acquisition of ProstaScint in May 2015 and are generating sales of this FDA-approved prostate cancer imaging agent. As prostate cancer is a condition commonly diagnosed and treated by urologists, ProstaScint complements our urology-focused product portfolio and pipeline. Prostate cancer is the most common cancer among men in the United States, with an estimated 241,000 annual cases (as of 2012). Further, more than 2.2 million men were alive in 2006 with some history of prostate cancer, and over 30,000 U.S. men die each year from the disease. The effect of prostate cancer on healthcare economics is substantial, which makes the need for accurate disease staging critical for treatment and management strategies. The U.S. market for the diagnosis and screening of prostate cancer is expected to total \$17.4 billion by 2017, a compound annual growth rate, or CAGR, of 7.5% since 2012. At June 30, 2017, the ProstaScint asset was impaired based upon sales projections that we intend to only sell this product through mid-fiscal 2019, when this product expires.

Fiera® Personal Care Device

The Fiera Personal Care Device is the first hands-free wearable product for women, specifically designed to increase interest in, and physical readiness for sex, naturally. The product does so by creating a physically aroused state via the genitals. Co-created with healthcare professionals, Fiera is a small, discreet, fast-acting, and hands-free product that is designed to be used in advance of physical intimacy to help women feel ready and in the mood for sex. Fiera uses gentle suction coupled with stimulation to enhance blood flow to the genitals, increase lubrication, and ultimately get a woman ready for partnered intimacy in as little as 5 minutes.

With the acquisition of Nuelle, Inc., Aytu is expanding into the women's sexual health and wellness market. Sexual wellness is inclusive of female sexual dysfunction which is a term that describes various sexual problems, such as low desire or interest, diminished arousal, orgasmic difficulties, and dyspareunia. Female sexual dysfunction is considered common, with an estimated prevalence of 43% from the U.S. National Health and Social Life Survey and similar estimates from other large, population-based surveys in the United States and the United Kingdom. In a study of over 31,000 women in the United States it was determined that 44% of women report a sexual problem. Specifically, the most common sexual problem is low desire, with a prevalence of 39%; followed by low arousal (26%) and orgasm difficulties (21%). Additionally, the incidence of sexual dysfunction is expected to increase through 2020 to effect more than 124 million women worldwide.

Fiera has been well studied and tested by health care professionals, and consumers and is scientifically proven to enhance arousal and interest in women of all ages, including pre- and post-menopausal women. Recent consumer study results in women ages 25 – 75 showed that after 4 weeks of using Fiera:

- 97% of women felt physically aroused;
- 96% looked forward to being intimate with their partner;
- 93% felt excited and ready for sex;
- 89% of women felt more "in the mood";
- 87% felt as ready for sex as their partner did;
- 86% of women felt a stronger emotional connection with their partner;
- 85% reported their orgasm felt pleasurable and intense;
- 85% thought about sex more often; and
- 85% engaged in sexual activity more often and felt satisfied in her relationship.

Previous studies also showed that 87% of women felt increased desire and 67% felt increased lubrication.

Key elements of our business strategy include:

- Expand the commercialization of Natesto in the U.S. for the treatment of hypogonadism with our direct sales force. We launched Natesto in late summer 2016 and are targeting high prescribing TRT prescribers with a primary emphasis on urologists and male health practitioners.
- Expand the commercialization in the U.S. of Fiera, through professional promotion using our existing sales force.
- Establish MiOXSYS as a leading in vitro diagnostic device in the assessment of male infertility.
- Continue the commercialization of FDA-approved ProstaScint for the staging of both newly diagnosed high-risk and recurrent prostate cancer patients.
- Acquire additional marketed products and late-stage development assets within our core urology focus that can be efficiently marketed through our growing commercial organization.
- Develop a pipeline of urology products, with a focus on identifying novel products with sufficient clinical proof of concept that require modest internal R&D expense.

We plan to augment our core in-development and commercial assets through efficient identification of complementary therapeutics, devices, and diagnostics related to urological disorders. We intend to seek assets that are near commercial stage or already generating revenues. Further, we intend to seek to acquire products through asset purchases, licensing, co-development, or collaborative commercial arrangements (co-promotions, co-marketing, etc.).

Our management team has extensive experience across a wide range of business development activities and have in-licensed or acquired products from large, mid-sized, and small enterprises in the United States and abroad. Through an assertive product and business development approach, we expect that we will build a substantial portfolio of complementary urology products.

Corporate Information

We were incorporated as Rosewind Corporation on August 9, 2002 in the State of Colorado.

Vyrix Pharmaceuticals, Inc., or Vyrix, was incorporated under the laws of the State of Delaware on November 18, 2013 and was wholly owned by Ampio Pharmaceuticals, Inc. (NYSE American: AMPE), or Ampio, immediately prior to the completion of the Merger (defined below). Vyrix was previously a carve-out of the sexual dysfunction therapeutics business, including the late-stage men's health product candidates, Zertane and Zertane-ED, from Ampio, that carve-out was announced in December 2013. Luoxis Diagnostics, Inc., or Luoxis, was incorporated under the laws of the State of Delaware on January 24, 2013 and was majority owned by Ampio immediately prior to the completion of the Merger. Luoxis was initially focused on developing and advancing the RedoxSYS System. The MiOXSYS System was developed following the completed development of the RedoxSYS System.

On March 20, 2015, Rosewind formed Rosewind Merger Sub V, Inc. and Rosewind Merger Sub L, Inc., each a wholly-owned subsidiary formed for the purpose of the Merger, and on April 16, 2015, Rosewind Merger Sub V, Inc. merged with and into Vyrix and Rosewind Merger Sub L, Inc. merged with and into Luoxis, and Vyrix and Luoxis became subsidiaries of Rosewind. Immediately thereafter, Vyrix and Luoxis merged with and into Rosewind with Rosewind as the surviving corporation (herein referred to as the Merger). Concurrent with the closing of the Merger, Rosewind abandoned its pre-merger business plans, and we now solely pursue the specialty healthcare market, focusing on urological related conditions, including the business of Vyrix and Luoxis. When we discuss our business in this prospectus, we include the pre-Merger business of Luoxis and Vyrix.

On June 8, 2015, we (i) reincorporated as a domestic Delaware corporation under Delaware General Corporate Law and changed our name from Rosewind Corporation to Aytu BioScience, Inc., and (ii) effected a reverse stock split in which each common stock holder received one share of common stock for each 12.174 shares outstanding. At our annual meeting of shareholders held on May 24, 2016, our shareholders approved (1) an amendment to our Certificate of Incorporation to reduce the number of authorized shares of common stock from 300.0 million to 100.0 million, which amendment was effective on June 1, 2016, and (2) an amendment to our Certificate of Incorporation to affect a reverse stock split at a ratio of 1-for-12 which became effective on June 30, 2016. At our special meeting of shareholders held on July 26, 2017, our shareholders approved an amendment to our Certificate of Incorporation to affect a reverse stock split at a ratio of 1-for-20 which became effective on August 25, 2017. All share and per share amounts in this prospectus have been adjusted to reflect the effect of these three reverse stock splits (hereafter referred to collectively as the "Reverse Stock Splits").

Our principal executive offices are located at 373 Inverness Parkway, Suite 206, Englewood, Colorado 80112, and our phone number is (720) 437-6580. Our corporate website address is <http://aytubio.com>. The information contained on, connected to or that can be accessed via our website is not part of this prospectus. We have included our website address in this prospectus as an inactive textual reference only and not as an active hyperlink.

RISK FACTORS

Investing in our securities involves a high degree of risk. Before making an investment decision, you should consider carefully the risks, uncertainties and other factors described in our most recent Annual Report on Form 10-K, as supplemented and updated by subsequent quarterly reports on Form 10-Q and current reports on Form 8-K that we have filed or will file with the SEC, which are incorporated by reference into this prospectus.

Our business, affairs, prospects, assets, financial condition, results of operations and cash flows could be materially and adversely affected by these risks. For more information about our SEC filings, please see "Where You Can Find More Information."

USE OF PROCEEDS

Unless otherwise indicated in a prospectus supplement, we intend to use the net proceeds from the sale of the securities under this prospectus for general corporate purposes, including and for general working capital purposes. We may also use a portion of the net proceeds to acquire or invest in businesses and products that are complementary to our own, although we have no current plans, commitments or agreements with respect to any acquisitions as of the date of this prospectus.

DESCRIPTION OF CAPITAL STOCK

General

We are authorized to issue up to 100.0 million shares of common stock, par value \$0.0001 per share, and 50.0 million shares of preferred stock, par value \$0.0001 per share.

As of November 21, 2017, a total of 4,897,638 shares of our common stock were issued and outstanding, and a total of 1,900 shares of our Series A Convertible Preferred Stock were issued and outstanding.

Common Stock

The holders of common stock are entitled to one vote per share. Our Certificate of Incorporation does not expressly prohibit cumulative voting. The holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of legally available funds. Upon liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all assets that are legally available for distribution. The holders of our common stock have no preemptive, subscription, redemption or conversion rights.

The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock, which may be designated solely by action of the Board of Directors and issued in the future.

Preferred Stock

Our Certificate of Incorporation provides our Board of Directors with the authority to divide the preferred stock into series and to fix and determine the rights and preferences of the shares of any series of preferred stock established to the full extent permitted by the laws of the State of Delaware and the Certificate of Incorporation.

On August 11, 2017, we filed a Certificate of Designation of Series A Convertible Preferred Stock with the Delaware Secretary of State classifying and designating the rights, preferences and privileges of the Series A Preferred Stock, of which there are 10,000 shares authorized. As of August 15, 2017, a total of 2,250 shares of Series A Convertible Preferred Stock were issued and outstanding. At any time, at the option of the holder, Series A Preferred Stock may be converted into a number of shares of common stock equal to \$1,000.00 divided by the conversion price, which is \$3.00, subject to adjustment for stock splits, stock dividends and similar corporate events. A holder will be prohibited from converting any Series A Preferred Stock if, as a result of such conversion, the holder, together with its affiliates, would own more than 9.99% of the total number of shares of our common stock then issued and outstanding. Except as otherwise expressly provided by law, the holders of shares of Series A Preferred Stock are entitled to vote with the common stock, as if converted into shares of common stock, provided, however, that in no event will a holder of shares of Series A Preferred Stock be entitled to vote a number of shares in excess of such holder's Beneficial Ownership Limitation.

Transfer Agent and Registrar

The transfer agent of our common stock is VStock Transfer. Their address is 18 Lafayette Place, Woodmere, NY 11598.

Listing

Our common stock is currently traded on the NASDAQ Capital Market under the symbol "AYTU".

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of preferred stock or common stock. Warrants may be issued independently or together with any preferred stock or common stock, and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between a warrant agent specified in the agreement and us. The warrant agent will act solely as our agent in connection with the warrants of that series and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of some provisions of the securities warrants is not complete. You should refer to the securities warrant agreement, including the forms of securities warrant certificate representing the securities warrants, relating to the specific securities warrants being offered for the complete terms of the securities warrant agreement and the securities warrants. The securities warrant agreement, together with the terms of the securities warrant certificate and securities warrants, will be filed with the Securities and Exchange Commission in connection with the offering of the specific warrants.

The applicable prospectus supplement will describe the following terms, where applicable, of the warrants in respect of which this prospectus is being delivered:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, amount and terms of the offered securities purchasable upon exercise of the warrants;
- if applicable, the date on and after which the warrants and the offered securities purchasable upon exercise of the warrants will be separately transferable;
- the terms of the securities purchasable upon exercise of such warrants and the procedures and conditions relating to the exercise of such warrants;
- any provisions for adjustment of the number or amount of securities receivable upon exercise of the warrants or the exercise price of the warrants;
- the price or prices at which and currency or currencies in which the offered securities purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which the right shall expire;
- the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- if appropriate, a discussion of Federal income tax consequences; and
- any other material terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Warrants for the purchase of common stock or preferred stock will be offered and exercisable for U.S. dollars only. Warrants will be issued in registered form only.

Upon receipt of payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will, as soon as practicable, forward the purchased securities. If less than all of the warrants represented by the warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Prior to the exercise of any securities warrants to purchase preferred stock or common stock, holders of the warrants will not have any of the rights of holders of the common stock or preferred stock purchasable upon exercise, including in the case of securities warrants for the purchase of common stock or preferred stock, the right to vote or to receive any payments of dividends on the preferred stock or common stock purchasable upon exercise.

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of shares of common stock, shares of preferred stock or warrants or any combination of such securities.

The applicable prospectus supplement will specify the following terms of any units in respect of which this prospectus is being delivered:

- the terms of the units and of any of the common stock, preferred stock and warrants comprising the units, including whether and under what circumstances the securities comprising the units may be traded separately;
- a description of the terms of any unit agreement governing the units; and
- a description of the provisions for the payment, settlement, transfer or exchange of the units.

PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (i) to or through underwriters or dealers, (ii) directly to purchasers, including our affiliates, (iii) through agent, or (iv) through a combination of any these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. The prospectus supplement will include the following information:

- the terms of the offering;
- the names of any underwriters or agent;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- any over-allotment options under which underwriters may purchase additional securities from us;
- the net proceeds from the sale of the securities
- any delayed delivery arrangements
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- any initial public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers;
- any commissions paid to agent; and
- any securities exchange or market on which the securities may be listed.

Sale Through Underwriters or Dealers

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

Direct Sales and Sales Through Agent

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agent would be involved. Such securities may also be sold through agent designated from time to time. The prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent. Unless otherwise indicated in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in the prospectus supplement.

Delayed Delivery Contracts

If the prospectus supplement indicates, we may authorize agent, underwriters or dealers to solicit offers from certain types of institutions to purchase securities at the public offering price under delayed delivery contracts. These contracts would provide for payment and delivery on a specified date in the future. The contracts would be subject only to those conditions described in the prospectus supplement. The applicable prospectus supplement will describe the commission payable for solicitation of those contracts.

Continuous Offering Program

Without limiting the generality of the foregoing, we may enter into a continuous offering program equity distribution agreement with a broker-dealer, under which we may offer and sell shares of our common stock from time to time through a broker-dealer as our sales agent. If we enter into such a program, sales of the shares of common stock, if any, will be made by means of ordinary brokers' transactions on the NASDAQ Capital Market at market prices, block transactions and such other transactions as agreed upon by us and the broker-dealer. Under the terms of such a program, we also may sell shares of common stock to the broker-dealer, as principal for its own account at a price agreed upon at the time of sale. If we sell shares of common stock to such broker-dealer as principal, we will enter into a separate terms agreement with such broker-dealer, and we will describe this agreement in a separate prospectus supplement or pricing supplement.

Market Making, Stabilization and Other Transactions

Unless the applicable prospectus supplement states otherwise, other than our common stock all securities we offer under this prospectus will be a new issue and will have no established trading market. We may elect to list offered securities on an exchange or in the over-the-counter market. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Rule 104 under the Securities Exchange Act. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

General Information

Agent, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act. Our agent, underwriters, and dealers, or their affiliates, may be customers of, engage in transactions with or perform services for us, in the ordinary course of business.

LEGAL MATTERS

The validity of the issuance of the securities offered by this prospectus will be passed upon for us by Sichenzia Ross Ference Kesner LLP, New York, New York.

EXPERTS

The consolidated financial statements of Aytu BioScience, Inc. at June 30, 2017 and 2016, and for each of the two years in the period ended June 30, 2017, included in this prospectus have been audited by EKS&H LLLP, independent registered public accounting firm, as set forth in their report thereon appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and special reports, along with other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room.

This prospectus is part of a registration statement on Form S-3 that we filed with the SEC to register the securities offered hereby under the Securities Act of 1933, as amended. This prospectus does not contain all of the information included in the registration statement, including certain exhibits and schedules. You may obtain the registration statement and exhibits to the registration statement from the SEC at the address listed above or from the SEC's internet site.

You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. You may also request a copy of these filings, at no cost, by writing or telephoning us at: 373 Inverness Parkway, Suite 206, Englewood, Colorado 80112, (720) 437-6580.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

This prospectus is part of a registration statement filed with the SEC. The SEC allows us to “incorporate by reference” into this prospectus the information that we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. The following documents are incorporated by reference and made a part of this prospectus:

- our Annual Report on [Form 10-K](#) for the fiscal year ended June 30, 2017, filed with the SEC on August 31, 2017.
- our Quarterly Report on [Form 10-Q](#) for the fiscal quarter ended September 30, 2017, filed with the SEC on November 9, 2017.
- our Current Reports on Form 8-K filed with the SEC on [July 27, 2017](#), [August 16, 2017](#), [August 29, 2017](#), [October 3, 2017](#), and [October 27, 2017](#), including our amended current report on Form 8-K filed on [July 20, 2017](#).
- the description of our common stock contained in our Registration Statement on [Form 8-A](#) filed with the SEC on October 17, 2017 (File No. 001-38247), including any amendment or report filed for the purpose of updating such description; and
- all reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of this offering.

Notwithstanding the foregoing, information furnished under Items 2.02 and 7.01 of any Current Report on Form 8-K, including the related exhibits, is not incorporated by reference in this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will furnish without charge to you, on written or oral request, a copy of the Annual Report incorporated by reference, including exhibits to the document. You should direct any requests for documents to Aytu BioScience, Inc., 373 Inverness Parkway, Suite 206, Englewood, Colorado 80112, (720) 437-6580.



Aytu BioScience, Inc.

**12,539,187 Shares of Common Stock
Warrants to Purchase 12,539,187 Shares of Common Stock
Placement Agent Warrants to Purchase up to 815,047 Shares of Common Stock**

Prospectus Supplement

H.C. Wainwright & Co.

March 19, 2020
