

PROSPECTUS SUPPLEMENT
(to Prospectus dated July 13, 2018)



4,318,272 Shares of Common Stock

We are offering 4,318,272 shares of our common stock at a price of \$2.025 per share to certain institutional and accredited investors pursuant to this prospectus supplement and the accompanying base prospectus. In a concurrent private placement, we are issuing to the purchasers of shares of our common stock in this offering warrants to purchase up to an aggregate of 4,318,272 shares of our common stock (the "Warrants") with a five and one-half year term and exercise price of \$2.13 per share, subject to adjustment as provided therein. The Warrants and the shares of our common stock issuable upon the exercise of the Warrants are not being offered pursuant to this prospectus supplement and the accompanying prospectus. The Warrants are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act of 1933, as amended, and Rule 506(b) promulgated thereunder. Holders of the Warrants will have registration rights with respect to the shares of our common stock issuable upon the exercise of the Warrants as described in this prospectus supplement.

Our common stock is listed on the Nasdaq Capital Market under the symbol "INNT." On April 26, 2019, the last reported sale price for our common stock on the Nasdaq Capital Market was \$1.90 per share.

We have engaged H.C. Wainwright & Co., LLC, or Wainwright or the placement agent, to act as our exclusive placement agent for this offering. The placement agent has agreed to use its "reasonable best efforts" to arrange for the sale of our common stock offered by this prospectus supplement and the accompanying base prospectus, but the placement agent has no obligation to purchase or sell any of such shares or to arrange for the purchase or sale of any specific number or dollar amount of such shares. There is no required minimum number of shares of our common stock that must be sold as a condition to completion of this offering. Because there is no minimum offering amount required as a condition to closing this offering, the actual offering amount, placement agent fees, and proceeds to us, if any, are not presently determinable and may be substantially less than the total maximum offering amounts set forth below. We have not arranged to place the funds from investors in an escrow, trust or similar account. We have agreed to pay the placement agent the fees set forth in the table below in connection with this offering, which assumes that we sell all of the shares of common stock we are offering hereby.

	<u>Per Share</u>	<u>Total</u>
Offering price	\$ 2.025	\$ 8,744,500.80
Placement agent fees (1)	\$ 0.142	\$ 612,115.06
Proceeds to us (before expenses) (2)	\$ 1.883	\$ 8,132,385.74

- (1) In addition, we have agreed to reimburse the placement agent for certain of its expenses, pay a management fee, and issue warrants to purchase shares of common stock to the placement agent. Neither the placement agent warrants nor the shares of our common stock issuable upon exercise of the placement agent warrants are being registered hereby. See "Plan of Distribution" beginning on page S-27 of this prospectus supplement for more information.
- (2) Assumes all shares offered hereby are sold. Does not include proceeds from the exercise of the warrants to be issued to the placement agent or the Warrants to be issued in the concurrent private placement in cash, if any.

We are an "emerging growth company" under the federal securities laws, and as such, we are subject to reduced public company disclosure standards.

Investing in our common stock involves a high degree of risk. Please read "Risk Factors" beginning on page S-6 of this prospectus supplement, page 3 of the accompanying prospectus, and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus for a discussion of the factors you should carefully consider before deciding to purchase our common stock.

As of April 29, 2019, the aggregate market value of our outstanding voting and non-voting common equity held by non-affiliates was approximately \$72.6 million, based on an aggregate of 31,065,602 shares of common stock outstanding, of which 29,265,784 shares were held by non-affiliates, and a price per share of \$2.48, the closing price of our common stock on March 18, 2019, as reported on the Nasdaq Capital Market. Pursuant to General Instruction I.B.6 of Form S-3, in no event will we sell securities in a public primary offering with a

value exceeding more than one-third of our public float in any 12-month period so long as our public float remains below \$75.0 million. We have not sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to and including the date of this prospectus but excluding the shares being sold pursuant to this offering.

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

We expect that delivery of the shares being offered pursuant to this prospectus supplement and the accompanying base prospectus will be made on or about May 1, 2019, subject to customary closing conditions.

H.C. Wainwright & Co.

Prospectus Supplement dated April 29, 2019

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PROSPECTUS

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this offering of common stock and also adds to and updates information contained in the accompanying prospectus, or the base prospectus, and the documents incorporated by reference in this prospectus supplement and the accompanying base prospectus. The second part, the accompanying base prospectus, dated July 13, 2018, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus supplement, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying base prospectus or any document incorporated by reference that was filed with the U.S. Securities and Exchange Commission, or SEC, before the date of this prospectus supplement, you should rely on the information in this prospectus supplement; provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in the accompanying base prospectus—the statement in the document having the later date modifies or supersedes the earlier statement.

This prospectus supplement and the accompanying base prospectus are part of a registration statement on Form S-3 that we filed with the SEC using a “shelf” registration process. The 4,318,272 shares of common stock that may be offered, issued and sold under this prospectus is included in the \$175,000,000 of securities that may be offered, issued and sold by us pursuant to our shelf registration statement. This prospectus is deemed a prospectus supplement to the accompanying base prospectus included in the registration statement of which this prospectus forms a part.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants may be subject to exceptions and qualifications contained in separate disclosure schedules, may apply standards of materiality in a manner different from what may be viewed as material to you or other investors and may no longer continue to be true as of any given date. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The distribution of this prospectus supplement and the accompanying base prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying base prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus supplement and the accompanying base prospectus outside the United States. This prospectus supplement and the accompanying base prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying base prospectus by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

As permitted by the rules and regulations of the SEC, the registration statement, of which this prospectus supplement and the accompanying base prospectus form a part, includes additional information not contained in this prospectus supplement or the accompanying base prospectus. You should read this prospectus supplement, the registration statement and the accompanying base prospectus together with the documents incorporated by reference herein and therein before buying any shares of our common stock in this offering. See “Where You Can Find Additional Information” on page S-50 of this prospectus supplement.

You should not assume that the information in this prospectus supplement, the accompanying base prospectus or any other offering materials is accurate as of any date other than the date on the front of each document, regardless of the time of delivery of this prospectus supplement, the accompanying base prospectus or such other offering materials or the time of any sale of securities. Our business, financial condition, results of operations and prospects may have changed since then.

Except where the context otherwise requires or where otherwise indicated, the terms “we,” “us,” “our,” “Innovate” and “the Company” refer to Innovate Biopharmaceuticals, Inc., a Delaware corporation, and its consolidated subsidiaries, if any.

FORWARD-LOOKING STATEMENTS

The information in this prospectus supplement and the accompanying base prospectus and the information incorporated herein and therein by reference includes 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 forward-looking statements are based on current expectations and beliefs and involve numerous risks and uncertainties that could cause actual results to differ materially from expectations. These forward-looking statements should not be relied upon as predictions of future events as we cannot assure you that the events or circumstances reflected in these statements will be achieved or will occur. When used in this this prospectus supplement and the accompanying base prospectus and the information incorporated herein and therein by reference, the words “believe,” “may,” “could,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” “indicate,” “seek,” “should,” “would” and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements contain these identifying words. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements.

You should not rely upon forward-looking statements as guarantees of future performance or as predictions of future events. We have based these forward-looking statements largely on our current estimates of our financial results and our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties and assumptions that may cause our actual results to differ materially from those contained in any forward-looking statements, including those described in “Risk Factors” in this prospectus supplement, the accompanying base prospectus and in our most recent Annual Report on Form 10-K, as amended, and subsequent Quarterly Reports on Form 10-Q and in our other filings with the SEC that are incorporated by reference in this prospectus supplement or the accompanying base prospectus. Moreover, we operate in a highly competitive and rapidly changing environment and new risks emerge from time to time. If any of these risks or uncertainties materialize or any of these assumptions prove incorrect, our results could differ materially from the forward-looking statements in this prospectus supplement.

These forward-looking statements include, among other things, statements about:

- the cost, timing and results of the development of our clinical programs, including of INN-202 (for celiac disease), INN-217 (for nonalcoholic steatohepatitis, or NASH), INN-289 (for Crohn’s disease), INN-108 (for ulcerative colitis), and INN-329 (for magnetic resonance cholangiopancreatography, or MRCP);
- the commercial potential of INN-202 and our other clinical programs;
- the timing of, and our ability to obtain and maintain regulatory approvals for INN-202 and our other clinical products;
- the development of any future product candidates, including alcoholic steatohepatitis, or ASH;
- our plans to obtain funding for our operations;
- the development, regulatory approval, efficacy and commercialization of competing products;
- our estimates and expectations, including estimates of the potential market for our product candidates and projected cash needs and timing of the use of cash;
- our liquidity position;
- our intellectual property plans; and
- our anticipated use of the net proceeds in the offering.

All forward-looking statements in this prospectus supplement are current only as of the date of this prospectus supplement. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any statement is made or to reflect the occurrence of unanticipated events except as required by law.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus supplement, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information.

PROSPECTUS SUPPLEMENT SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in this prospectus supplement and the accompanying base prospectus or incorporated by reference herein or therein. This summary does not contain all of the information that you should consider before deciding to invest in our common stock. You should carefully read this entire prospectus supplement, the accompanying base prospectus and any related free writing prospectus, including each of the documents incorporated herein or therein by reference, before making an investment decision. Investors should carefully consider the information set forth under "Risk Factors" in this prospectus supplement on page S-6, in any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus supplement. You also should carefully read the information incorporated by reference into this prospectus supplement, including our financial statements, other information and the exhibits to the registration statement of which the accompanying base prospectus is a part.

Overview

We are a clinical-stage biopharmaceutical company developing novel medicines for autoimmune and inflammatory diseases with unmet needs. Our pipeline includes drug candidates for celiac disease, nonalcoholic steatohepatitis, or NASH, alcoholic steatohepatitis, or ASH, Crohn's disease and ulcerative colitis. We are planning to commence our Phase 3 registration trials for our lead program, INN-202 (larazotide acetate or larazotide) in the first half of 2019 and believe this program has the potential to be the first-to-market therapeutic for celiac disease, an unmet medical need, which affects an estimated 1% of the North American population or approximately 3 million individuals.

Reverse Recapitalization and Merger

On January 29, 2018, Monster Digital, Inc., or Monster, and privately-held Innovate Biopharmaceuticals Inc., or Private Innovate, completed a reverse recapitalization in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated July 3, 2017, as amended, or the Merger Agreement, by and among Monster, Monster Merger Sub, Inc., or Merger Sub, and Private Innovate. In connection with the transaction, Private Innovate changed its name to IB Pharmaceuticals Inc., or IB Pharmaceuticals. Pursuant to the Merger Agreement, Merger Sub merged with and into IB Pharmaceuticals with IB Pharmaceuticals surviving as the wholly-owned subsidiary of Monster, which we refer to as the Merger. Immediately following the Merger, Monster changed its name to Innovate Biopharmaceuticals, Inc., and on March 29, 2018, IB Pharmaceuticals was merged into Innovate and ceased to exist. In connection with the closing of the Merger, Innovate's common stock began trading on the Nasdaq Capital Market under the ticker symbol "INNT" on February 1, 2018. Monster was incorporated in Delaware in November 2010 under the name "Monster Digital, Inc."

Estimated Unaudited Financial Information for the quarter ended March 31, 2019

As of March 31, 2019, the Company had estimated unaudited cash and cash equivalents of \$11.5 million. This is a preliminary unaudited estimate of the cash and cash equivalents of the Company as of March 31, 2019. This preliminary unaudited estimate has been prepared solely on the basis of information that is currently available to, and that is the responsibility of, the Company's management. The Company's independent registered public accounting firm has not audited or reviewed, and does not express an opinion with respect to, this preliminary unaudited estimate. This preliminary unaudited estimate is not a comprehensive statement of the Company's financial position as of March 31, 2019, and remains subject to, among other things, the completion of the Company's financial closing procedures, final adjustments, and the quarterly review by the Company's independent registered public accounting firm, which may materially impact this preliminary unaudited estimate.

Corporate Information

Our principal executive office is currently located at 8480 Honeycutt Road, Suite 120, Raleigh, North Carolina 27615. Our telephone number is (919) 275-1933. Our website address is www.innovatebiopharma.com. Information contained on or that can be accessed through the website is not incorporated by reference into this prospectus supplement or accompanying base prospectus and should not be considered to be part of this prospectus supplement or the accompanying base prospectus.

Implications of Being an Emerging Growth Company

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups, or JOBS, Act enacted in April 2012. We will remain an “emerging growth company” until the earliest to occur of (i) the last day of the fiscal year in which we have approximately \$1.07 billion or more in annual gross revenue, (ii) the date we qualify as a “large accelerated filer,” with at least \$700 million of equity securities held by non-affiliates as of the prior June 30th, (iii) the date on which we have issued, in any three-year period, more than \$1.0 billion in non-convertible debt securities, or (iv) December 31, 2021.

While we are an “emerging growth company,” we will take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not “emerging growth companies” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation and financial statements in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote to approve executive compensation and shareholder approval of any golden parachute payments not previously approved.

For further information regarding us and our financial information, you should refer to our recent filings with the SEC. See “Where You Can Find Additional Information.”

THE OFFERING

Common stock offered by us	4,318,272 Shares.
Offering price per share	\$2.025
Use of proceeds	We intend to use the net proceeds from this offering in connection with the Phase 3 registration trials of our lead program, INN-202, as well as for working capital and general corporate purposes. See “Use of Proceeds.”
Common stock to be outstanding after this offering (1)	30,407,092 shares
Risk Factors	See “Risk Factors” in this prospectus supplement, the accompanying base prospectus and otherwise incorporated by reference herein and therein for a discussion of factors you should consider carefully before deciding to invest in shares of our common stock.
Nasdaq Capital Market symbol	“INNT”
Placement Agent Warrants	We will issue to the placement agent warrants to purchase up to a number of shares of common stock equal to 5.0% of the aggregate number of shares of common stock sold in this offering. The underwriter warrants shall have an initial exercise price of \$2.53125 per share, and are exercisable for five years beginning on the date of the effectiveness of this offering.
Concurrent private placement of Warrants	In the private placement, we are issuing to purchasers of our common stock in this offering Warrants to purchase up to 100% of the number of shares of common stock purchased by such purchaser, exercisable for five and one-half years beginning on the date of their issuance at an exercise price equal to \$2.13 per share, subject to certain adjustments. We expect the private placement will close concurrently with the closing of this offering. The Warrants and the shares of our common stock issuable upon the exercise of the Warrants are not being offered pursuant to this prospectus supplement and the accompanying prospectus. The Warrants are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act of 1933, as amended, and Rule 506(b) promulgated thereunder. Holders of the Warrants will have registration rights with respect to the shares of our common stock issuable upon the exercise of the Warrants as described in this prospectus supplement. There is no established public trading market for the Warrants, and we do not expect such a market to develop. See “Private Placement of Warrants.”

(1) The number of shares of our common stock to be outstanding immediately after this offering is based on 26,088,820 shares outstanding as of December 31, 2018, and excludes as of December 31, 2018:

- 776,131 shares of common stock issuable upon the exercise of outstanding stock options under the Company’s 2012 Omnibus Incentive Plan, as amended, or the Omnibus Plan, with a weighted-average exercise price of \$5.79 per share;

- 6,340,871 shares of common stock issuable upon the exercise of options outstanding under the Private Innovate 2015 Stock Issuance Plan, or the Private Innovate Plan, with a weighted-average exercise price of \$1.53 per share;
- 1,410,358 shares of common stock issuable upon the exercise of outstanding warrants, with an exercise price of \$3.18 per share;
- 349,555 shares of common stock issuable upon the exercise of outstanding warrants, with an exercise price of \$2.54 per share;
- 154,403 shares of common stock issuable upon the exercise of warrants issued by Monster, with a weighted-average exercise price of \$55.31 per share;
- shares of our common stock issuable upon conversion of the Senior Convertible Note that was repaid and cancelled in March 2019 (approximately 1,720,224 shares at a conversion price equal to the floor price of \$3.08 per share); and
- 2,230,057 shares of common stock reserved for future issuance under the Omnibus Plan as of December 31, 2018.

In addition, since December 31, 2018, we have (i) made grants of options to purchase up to 65,000 shares of common stock under the Omnibus Plan to certain of our executive officers, directors, employees and consultants, (ii) sold approximately 706,000 shares of common stock under our existing “at-the-market” facility, (iii) issued 4,181,068 shares and warrants to purchase up to 6,689,708 shares of our Common Stock to certain accredited investors and (iv) agreed to issue warrants to purchase up to 3,900,000 shares of our Common Stock pursuant to a securities purchase agreement to be entered into with certain of those accredited investors.

On March 8, 2019, we entered into a Securities Purchase Agreement with Atlas Sciences, LLC, a Utah limited liability company, or Atlas, pursuant to which we issued to Atlas an unsecured Convertible Promissory Note, or the Note, in the principal amount of \$5.5 million. Atlas may elect to convert all or a portion of the Note at any time and from time to time into our common stock at a conversion price of \$3.25 per share, subject to adjustment for stock splits, dividends, combinations and similar events. We may prepay all or a portion of the Note at any time for an amount equal to 115% of then outstanding obligations or the portion of the obligations we are prepaying. The Note may convert into shares of our common stock at various conversion prices. For example, if the entire principal amount of the Note converts into shares of our common stock at the floor price of \$3.25 per share, then we would be required to issue 1,692,307 shares to the Holder upon the conversion of the Note.

The Warrants offered in the private placement are exercisable for up to 4,318,272 shares of our common stock, at an initial exercise price of \$2.13 per share. Warrants to be issued to the placement agent in connection with the offering are exercisable for up to 215,914 shares of our common stock, at an initial exercise price of \$2.53125 per share.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise of outstanding options or warrants to purchase common stock since December 31, 2018.

RISK FACTORS

Before you invest in our shares of common stock, you should be aware that our business faces numerous financial and market risks, including those described below, as well as general economic and business risks. Our shares of common stock are speculative, and you should not make an investment in Innovate unless you can afford to bear the loss of your entire investment. Prior to making a decision about investing in our common stock, you should carefully consider the risks, uncertainties and assumptions discussed in our most recent Annual Report on Form 10-K and in our other filings with the SEC that are incorporated by reference in this prospectus supplement or the accompanying base prospectus, together with the information in this prospectus supplement and the accompanying base prospectus and any other information incorporated by reference herein or therein. The risks and uncertainties identified are not the only risks and uncertainties we face. If any of the material risks or uncertainties that we face were to occur, you could lose part or all of your investment.

Risks Related to this Offering and our Common Stock

The market price of our common stock has been and will likely in the future be volatile.

The stock market in general and the market for pharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. For example, since our stock began trading under the symbol “INNNT” on February 1, 2018, through March 31, 2019 the price thereof has ranged from a low of \$1.61 per share to a high of \$50.50 per share. Companies like us with a lower number of shares comprising their public floats and limited trading activity may experience greater volatility in their stock prices. The market price of our common stock may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including:

- regulatory or legal developments in the United States and foreign countries;
- results from or delays in clinical trials of our product candidates;
- announcements of regulatory approval or disapproval of, or delays in clinical trials for, INN-202 (for celiac disease), INN-217 (for NASH), INN-289 (for Crohn’s disease), INN-108 (for ulcerative colitis) and INN-329 (for magnetic resonance cholangiopancreatography or MRCP) or any future product candidates, including ASH;
- commercialization of our product candidates;
- FDA or other U.S. or foreign regulatory actions affecting us or our industry;
- introductions and announcements of new products by us, any commercialization partners or our competitors, and the timing of these introductions and announcements;
- variations in our financial results or those of companies that are perceived to be similar to us;
- changes in the structure of healthcare payment systems;
- announcements by us or our competitors of significant acquisitions, licenses, strategic partnerships, joint ventures or capital commitments;
- market conditions in the pharmaceutical and biopharmaceutical sectors and issuance of securities analysts’ reports or recommendations;
- actual or anticipated quarterly variations in our results of operations or those of our competitors;
- changes in financial estimates or guidance, including our ability to meet our future revenue and operating profit or loss estimates or guidance;
- our liquidity position and ability to raise additional capital;
- sales of substantial amounts of our stock by insiders and other stockholders, or the expectation that such sales might occur;
- general economic, industry and market conditions;

- additions or departures of key personnel;
- intellectual property, product liability or other litigation against us;
- expiration or termination of our potential relationships with strategic partners; and
- the other factors described in this “Risk Factors” section.

If securities or industry analysts do not publish research or publish unfavorable research about our business, our common stock price and trading volume could decline.

Equity research analysts do not currently provide research coverage of our common stock. In particular, as a smaller company, it may be difficult for us to attract the interest of equity research analysts. A lack of research coverage may adversely affect the liquidity of and market price of our common stock. To the extent we obtain equity research analyst coverage, we will not have any control of the analysts or the content and opinions included in their reports. The market price of our stock could decline if one or more equity research analysts begin coverage of our common stock and downgrade our common stock or issue other unfavorable commentary or research on us. If one or more equity research analysts ceases coverage of us in the future, or fails to publish reports on us regularly, demand for our common stock could decrease, which in turn could cause the market price of our common stock or trading volume to decline.

Sales of substantial amounts of our common stock in the public markets, or the perception that such sales might occur, could cause the market price of our common stock to drop significantly, even if our business is doing well.

If we or our existing stockholders sell, or indicate an intent to sell, substantial amounts of our common stock in the public markets, the trading price of our common stock could decline significantly. On March 17, 2018, we filed a shelf registration statement, or the Shelf Registration Statement, which was declared effective on July 13, 2018. Under the Shelf Registration Statement, we may, from time to time, sell our common stock in one or more offerings, including this offering, up to an aggregate dollar amount of \$175.0 million (of which up to an aggregate of \$40 million may be sold in an “at-the-market” offering as defined in Rule 415 of the Securities Act). In addition, the selling stockholders included in the Shelf Registration Statement may from time to time sell up to an aggregate amount of approximately 13.99 million shares of our common stock (including up to approximately 2.1 million shares issuable upon exercise of warrants) in one or more offerings. On October 26, 2018, we filed a prospectus supplement in connection with an “at-the-market” offering under the Shelf Registration Statement in which we may sell shares up to an aggregate of \$40 million. As of December 31, 2018, we had approximately 26.1 million shares of common stock outstanding and exercisable options and warrants to purchase approximately 5.3 million shares of common stock, excluding out-of-the-money stock options and warrants. In addition, the Note may be converted into shares of our common stock at any time at various conversion prices. The Long-Term Warrants and Short-Term Warrants have initial exercise prices equal to \$2.56 and \$4.00 per share, respectively, each subject to certain adjustments. We have also agreed to offer to certain existing stockholders additional warrants to purchase up to an aggregate of 3,900,000 shares of our common stock, and have agreed to issue the Warrants to purchase up to 4,318,272 shares of our common stock in a private placement in connection with this offering, each of which would have an initial exercise price of \$2.13 per share, subject to certain adjustments. We have agreed to file a registration statement registering the issuance of the shares of common stock underlying the Long-Term Warrants, Short-Term Warrants, the additional warrants to be issued to certain accredited investors, and the Warrants for resale by the holders of the warrants. The Short-Term Warrants issued in the March 2019 Offering were, and the Warrants to be issued in the private placement concurrent with this offering will be, exercisable immediately upon issuance. Therefore, sales of common stock by us or our stockholders under the Shelf Registration Statement or otherwise (including sales pursuant to Rule 144) may represent a significant percentage of our common stock currently outstanding. If we or our stockholders sell, or the market perceives that we or our stockholders intend to sell, substantial amounts of our common stock under the Shelf Registration Statement or otherwise, the market price of our common stock could decline significantly. For example, our closing stock price on July 13, 2018, prior to the Shelf Registration Statement being declared effective, was \$23.70 per share, and our closing stock price on July 16, 2018, after the Shelf Registration Statement was declared effective, was \$8.08 per share.

The issuance of additional shares of common stock may cause substantial dilution to our existing stockholders and reduce the trading price of our common stock.

We have outstanding and exercisable options and warrants that if exercised would result in the issuance of 5.3 million shares of our common stock as of December 31, 2018, excluding out-of-the-money stock options and warrants. In addition, the Note may be converted into shares of our common stock at any time at various conversion prices. We also sold 4,181,068 shares of common stock in the March 2019 Offering and issued the Short-Term Warrants and Long-Term Warrants to purchase up to 4,181,068

and 2,508,634 shares of our common stock, respectively, in the Private Placement. We have also agreed to offer to certain existing stockholders additional warrants to purchase up to an aggregate of 3,900,000 shares of our common stock, and in connection with this offering, have agreed to issue warrants to purchase up to an aggregate of 4,318,272 shares of our common stock. The placement agent in this offering will receive warrants to purchase up to 215,914 shares of our common stock. The issuance of shares upon exercise of warrants and options or conversion of the Note may result in dilution to the interests of other stockholders and may reduce the trading price of our common stock.

We may from time to time issue additional shares of our common stock at a discount from the then-current trading price. As a result, our stockholders would experience immediate dilution upon the purchase of any shares of such common stock sold at such discount. In addition, as opportunities present themselves, we may enter into financing or similar arrangements in the future, including the issuance of debt securities, preferred stock or common stock. If we issue common stock or securities convertible into common stock, our common stockholders would experience additional dilution and, as a result, the market price of our common stock may decline.

Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Our certificate of incorporation and restated bylaws provide that we will indemnify our directors and officers, in each case, to the fullest extent permitted by Delaware law.

To the extent that a third party brings a claim against us and/or any of our officers or directors, whether successful or not, a claim for indemnification brought by any of our directors or officers would reduce the amount of funds available for use in our business.

You will experience immediate and substantial dilution after this offering. The issuance of shares upon exercise of our outstanding options and warrants and the conversion of the Note may cause substantial dilution to our existing stockholders and reduce the trading price of our common stock.

Since the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution with respect to the net tangible book value of the common stock you purchase in this offering. After giving effect to the sale of up to 4,318,272 shares of our common stock at the offering price of \$2.025 per share, and after deducting discounts, commissions or other placement agent compensation, estimated offering expenses, based on our net tangible book value as of December 31, 2018, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$1.885 per share with respect to the net tangible book value of the common stock purchased in this offering. For a further description of the dilution that you will experience immediately after this offering, see "Dilution," below.

In addition, as of December 31, 2018, we had outstanding options and warrants that if exercised would result in the issuance of approximately 5.3 million shares of our common stock, excluding out-of-the-money stock options and warrants. In addition, we have the Note, which may be converted into shares of our common stock at any time at various conversion prices, and the Short-Term Warrants and Long-Term Warrants, which are exercisable for up to 4,181,068 and 2,508,634 shares of our common stock, respectively. We have also agreed to offer to certain existing stockholders additional warrants to purchase up to an aggregate of 3,900,000 shares of our common stock, and in connection with this offering, have agreed to issue warrants to purchase up to an aggregate of 4,318,272 shares of our common stock. The issuance of shares upon exercise of warrants and options or upon conversion of the Note may result in dilution to the interests of other stockholders and may reduce the trading price of our common stock.

In addition, we anticipate that we will need additional capital to fund our operations, and to the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

Concentration of ownership of our common stock among our existing principal stockholders may effectively limit the voting power of other stockholders.

Prior to this offering, based on filings made by them with the Commission, our executive officers, directors and current beneficial owners of 5% or more of our common stock, in aggregate, beneficially own approximately 46.9% of our outstanding common stock. Accordingly, these stockholders, acting together, will continue to be able to significantly influence all matters requiring stockholder approval, including the election and removal of directors and any merger or other significant corporate transactions. These stockholders may therefore delay or prevent a change of control, even if such a change of control would benefit the other

stockholders. The significant concentration of stock ownership may adversely affect the market price of our common stock due to investors' perception that conflicts of interest may exist or arise.

Anti-takeover provisions in our corporate charter documents and under Delaware law could make an acquisition of us more difficult, which could discourage takeover attempts and lead to management entrenchment, and the market price of our common stock may be lower as a result.

Certain provisions in our certificate of incorporation and bylaws may make it difficult for a third party to acquire, or attempt to acquire, control of our company, even if a change in control was considered favorable by the stockholders. For example, our board of directors has the authority to issue up to 10,000,000 shares of preferred stock. Our board of directors can fix the price, rights, preferences, privileges, and restrictions of the preferred stock without any further vote or action by our stockholders. The issuance of shares of preferred stock may delay or prevent a change in control transaction. As a result, the market price of our common stock and the voting and other rights of our stockholders may be adversely affected. An issuance of shares of preferred stock may result in the loss of voting control to other stockholders.

Our organizational documents also contain other provisions that could have an anti-takeover effect, including provisions that:

- provide for a classified board of directors;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- eliminate cumulative voting in the election of directors;
- authorize the board of directors to issue shares of preferred stock and determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval;
- prohibit director removal without cause and to allow removal with cause, and to allow amendment of certain provisions of our amended and restated certificate of incorporation and our bylaws, only by the vote of the holders of at least two-thirds of all then-outstanding shares of common stock of the Company;
- grant our board of directors the exclusive authority to increase or decrease the size of our board of directors;
- permit stockholders to only take actions at a duly called annual or special meeting and not by written consent;
- prohibit stockholders from calling a special meeting of stockholders;
- require that stockholders give advance notice to nominate directors or submit proposals for consideration at stockholder meetings; and
- authorize the board of directors, by a majority vote, to amend the bylaws.

In addition, we are subject to the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. These provisions could discourage potential acquisition proposals and could delay or prevent a change in control transaction. They could also have the effect of discouraging others from making tender offers for our common stock, including transactions that may be in your best interests. These provisions may also prevent changes in our management or limit the price that certain investors are willing to pay for our stock.

We may be subject to litigation related to our status as a public company, which is expensive and could divert management attention.

The market price of our common stock may be volatile, and in the past companies that have experienced volatility in the market price of their stock have been subject to securities related litigation, including class action litigation. We may be the target of this type of litigation, or other litigation related to our status as a public company, in the future. For example, a claim has been filed against us in the Superior Court of the State of Delaware by one of our former consultants who received compensatory stock options, demanding damages of up to approximately \$3.6 million plus punitive damages in connection with a delay in his ability to exercise his options and sell the underlying shares of our common stock. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

We will have broad discretion in the use of proceeds we receive in this offering for working capital and general corporate purposes.

The net proceeds of this offering are being allocated for the Phase 3 registration trials of our lead program, INN-202, as well as for working capital and general corporate purposes. Our management will have broad discretion over the use and investment of the net proceeds of this offering within those categories, and accordingly investors will need to rely upon the judgment of our management with respect to the use of proceeds, with only limited information concerning management's specific intentions. See "Use of Proceeds" for further details.

We have not paid cash dividends in the past and do not expect to pay dividends in the future. Any return on investment may be limited to the value of our common stock.

We have never paid cash dividends on our common stock and do not anticipate paying cash dividends in the near future. The payment of dividends on our common stock will depend on earnings, financial condition and other business and economic factors affecting us at such time as our board of directors may consider relevant. If we do not pay dividends, our common stock may be less valuable because a return on investment will only occur if our stock price appreciates.

We will continue to seek additional funds through equity offerings, debt financings or other capital sources, which may impose restrictions on our business.

In order to raise additional funds to support our operations, we will continue to seek additional funds through equity offerings, debt financings or other capital sources, which may impose restrictive covenants that adversely impact our business. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. If we are unable to expand our operations or otherwise capitalize on our business opportunities due to such restrictions, our business, financial condition and results of operations could be materially adversely affected.

Our ability to use our net operating loss carryforwards and certain other tax attributes to offset future taxable income may be subject to certain limitations.

We have U.S. federal net operating loss carryforwards, or NOLs, which expire in various years if not utilized. In addition, we have federal research and development credit carryforwards. The federal research and development credit carryforwards expire in various years if not utilized. Under Sections 382 and 383 of Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," the corporation's ability to use its pre-change NOLs and other pre-change tax attributes, such as research tax credits, to offset its future post-change income and taxes may be limited. In general, an "ownership change" occurs if there is a cumulative change in our ownership by "5% shareholders" that exceeds 50 percentage points over a rolling three-year period. Similar rules may apply under state tax laws. We have not performed a formal study to determine whether any of our NOLs are subject to these limitations. We have recorded deferred tax assets for our NOLs and research and development credits and have recorded a full valuation allowance against these deferred tax assets. In the event that it is determined that we have in the past experienced additional ownership changes, or if we experience one or more ownership changes as a result of future transactions in our stock, then we may be further limited in our ability to use our NOLs and other tax assets to reduce taxes owed on the net taxable income that we earn in the event that we attain profitability. Any such limitations on the ability to use our NOLs and other tax assets could adversely impact our business, financial condition and operating results in the event that we attain profitability.

We must comply with laws, regulations and standards applicable to public companies, including evaluating our internal controls under Section 404 of the Sarbanes-Oxley Act of 2002, which requires significant cost and management attention, and any failure to comply with or adverse results from our compliance with such laws, regulations and standards could impact investor confidence and materially harm our business.

As a public company in the United States, and increasingly after we are no longer an "emerging growth company," we are subject to laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act and regulations implemented by the SEC and Nasdaq, that are subject to varying interpretations and may evolve over time as new guidance is provided by regulatory and governing bodies. We have invested and intend to continue to invest significant resources to comply with such laws, regulations and standards, which may divert management's time and attention from revenue-generating activities to compliance activities. If notwithstanding our efforts to comply with applicable laws, regulations and standards, we fail to comply, regulatory authorities may initiate legal proceedings against us and our business may be harmed.

As a public company in the United States, we are required, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. We are required to disclose any material weaknesses identified by our management in our internal control over financial reporting, and, when we are no longer an “emerging growth company,” we may need to provide a statement that our independent registered public accounting firm has issued an opinion on our internal control over financial reporting.

The controls and other procedures are designed to ensure that information required to be disclosed by us in the reports that we file with the SEC is disclosed accurately and is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms. We have developed internal control procedures designed to comply with the requirements of Section 404, but our controls may not be adequate because of changes in conditions or the degree of compliance with our policies or procedures may deteriorate, or material weaknesses in our internal control over financial reporting may be discovered (in addition to the material weaknesses already disclosed in the risk factors discussed in our Annual Report on Form 10-K for the year ended December 31, 2018, which is incorporated herein by reference). We may err in the design or operation of our controls, and all internal control systems, no matter how well designed and operated, can provide only reasonable assurance that the objectives of the control system are met. If we are unable, or are perceived as unable, to produce reliable financial reports due to internal control deficiencies, investors could lose confidence in our reported financial information and operating results, which could result in a negative market reaction. Furthermore, remediation of any identified material weaknesses, such as a requirement to issue a financial statement restatement, may cause delays in our filing of quarterly or annual financial results, which could limit our ability to raise capital, and may create a significant strain on our internal resources, increase our costs, cause management distraction and significantly affect our stock price in an adverse manner.

To fully comply with Section 404, we will need to retain additional employees to supplement our current finance staff, and we may not be able to do so in a timely manner, or at all. In addition, in the process of evaluating our internal control over financial reporting, we expect that certain of our internal control practices will need to be updated to comply with the requirements of Section 404 and the regulations promulgated thereunder, and we may not be able to do so on a timely basis, or at all. In the event that we are not able to demonstrate compliance with Section 404 in a timely manner, or are unable to produce timely or accurate financial statements, we may be subject to sanctions or investigations by regulatory authorities, such as the SEC or the stock exchange on which our stock is listed, and investors may lose confidence in our operating results and the price of our common stock could decline. Furthermore, if we are unable to certify that our internal control over financial reporting is effective and in compliance with Section 404, we may be subject to sanctions or investigations by regulatory authorities, such as the SEC or stock exchanges, and we could lose investor confidence in the accuracy and completeness of our financial reports, which could hurt our business, the price of our common stock and our ability to access the capital markets.

We are an “emerging growth company,” and the reduced disclosure requirements applicable to emerging growth companies could make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups, or JOBS, Act enacted in April 2012, and may remain an “emerging growth company” for up to five years following the completion of our initial public offering, although, if we have more than \$1.07 billion in annual revenue, we are deemed to be a large accelerated filer under the rules of the SEC, or we issue more than \$1.0 billion of non-convertible debt over a three-year period before the end of that five-year period, we would cease to be an “emerging growth company” as of the following December 31. For as long as we remain an “emerging growth company,” we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not “emerging growth companies.” These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “management’s discussion and analysis of financial condition and results of operations” disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and

- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies. We have irrevocably elected not to avail ourselves of this exemption. We cannot predict whether investors will find our common stock less attractive as a result of our reliance on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and the market price of our common stock may be reduced or more volatile.

USE OF PROCEEDS

We estimate the net proceeds to us from the sale of our common stock in this offering, if we sell all of the shares offered hereby, will be approximately \$7.9 million, after deducting the placement agent fees and estimated offering expenses payable by us and excluding any proceeds we may receive upon exercise of the warrants being offered in the private placement.

We intend to use the net proceeds from this offering in connection with the Phase 3 registration trials of our lead program, INN-202, as well as for working capital and general corporate purposes.

This expected use of net proceeds from this offering represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. As a result, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Pending use of the proceeds as described above or otherwise, we intend to invest the net proceeds of this offering in short- to medium-term, investment-grade, interest-bearing securities, certificates of deposit or government securities.

DIVIDEND POLICY

We have never declared or paid any dividends on our capital stock. We currently intend to retain all future earnings, if any, for the operation and expansion of our business and, therefore, we do not anticipate declaring or paying cash dividends for the foreseeable future. The payment of dividends, if any, will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends in our debt agreements, and other factors that our board of directors may deem relevant.

DILUTION

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

As of December 31, 2018, our net tangible book value was (\$3.7) million, or (\$0.14) per share of our common stock, based upon 26,088,820 shares. Historical net tangible book value per share is equal to our total tangible assets, less total liabilities, divided by the number of outstanding shares of our common stock. Dilution in net tangible book value per share represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the net tangible book value per share of common stock immediately after this offering.

On an as adjusted basis, after giving effect to our receipt of \$7.9 million of estimated net proceeds (after deducting commissions and estimated offering expenses payable by us) assuming we sell all 4,318,272 shares of common stock in this offering at an offering price of \$2.025 per share, our estimated as adjusted net tangible book value as of December 31, 2018 would have been approximately \$4.3 million, or \$0.14 per share. This amount would represent an immediate increase in estimated net tangible book value of \$0.28 per share of our common stock to existing stockholders and an immediate and substantial dilution in estimated net tangible book value of \$1.89 per share of our common stock to new investors purchasing shares of common stock in this offering at the offering price.

The following table illustrates this hypothetical dilution on a per share basis:

Offering price per share		\$	2.025
Historical net tangible book value per share as of December 31, 2018	\$	(0.14)	
Increase in net tangible book value per share attributable to new investors in this offering		0.28	
As adjusted net tangible book value per share after giving effect to this offering (estimated)			0.14
Dilution per share to new investors participating in this offering		\$	1.89

The above illustration of dilution per share to investors participating in this offering assumes no exercise of options or warrants to purchase shares of our common stock, including up to 4,318,272 shares of common stock issuable upon exercise, at an exercise price of \$2.13, of the Warrants to be issued in connection with this offering (see “Plan of Distribution” for more information). The exercise of any such securities may increase dilution to purchasers in this offering.

The number of shares of our common stock to be outstanding immediately after this offering is based on 26,088,820 shares outstanding as of December 31, 2018 and excludes as of December 31, 2018:

- 776,131 shares of common stock issuable upon the exercise of outstanding stock options under the Company’s 2012 Omnibus Incentive Plan, as amended, or the Omnibus Plan, with a weighted-average exercise price of \$5.79 per share;
- 6,340,871 shares of common stock issuable upon the exercise of options outstanding under the Private Innovate 2015 Stock Issuance Plan, or the Private Innovate Plan, with a weighted-average exercise price of \$1.53;
- 1,410,358 shares of common stock issuable upon the exercise of outstanding warrants, with an exercise price of \$3.18 per share;

- 349,555 shares of common stock issuable upon the exercise of outstanding warrants, with an exercise price of \$2.54 per share;
- 154,403 shares of common stock issuable upon the exercise of warrants issued by Monster, with a weighted-average exercise price of \$55.31 per share;
- any shares of our common stock issuable upon conversion of the Senior Convertible Note that has since been repaid and cancelled (approximately 1,720,224 shares at a conversion price equal to the floor price of \$3.08 per share); and
- 2,230,057 shares of common stock reserved for future issuance under the Omnibus Plan as of December 31, 2018.

In addition, since December 31, 2018, we have (i) made grants of options to purchase up to 65,000 shares of common stock under the Omnibus Plan to certain of our executive officers, directors, employees and consultants, (ii) sold approximately 706,000 shares of common stock under our existing “at-the-market” facility, (iii) issued 4,181,068 shares of common stock and warrants to purchase up to 6,689,708 shares of our Common Stock to certain accredited investors and (iv) agreed to issue warrants to purchase up to 3,900,000 shares of our Common Stock pursuant to a securities purchase agreement to be entered into with certain of those accredited investors.

The Note may convert into shares of our common stock at various conversion prices. For example, if the entire principal amount of the Note converts into shares of our common stock at the floor price of \$3.25 per share, then we would be required to issue 1,692,307 shares to the Holder upon the conversion of the Note.

The Warrants offered in the private placement are exercisable for up to 4,318,272 shares of our common stock, at an initial exercise price of \$2.13 per share. Warrants to be issued to the placement agent in connection with the offering are exercisable for up to 215,914 shares of our common stock, at an initial exercise price of \$2.53125 per share.

To the extent that any outstanding stock options or warrants are exercised, new stock options or warrants are issued, or we otherwise issue additional shares of common stock in the future at a price less than the offering price, there will be further dilution to investors participating in this offering.

In addition, we anticipate that we will need additional capital to fund our operations, and to the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

MATERIAL U.S. FEDERAL TAX CONSEQUENCES TO HOLDERS OF OUR COMMON STOCK

The following discussion is a summary of the material U.S. federal income tax consequences of the purchase, ownership and disposition of the shares of common stock issued pursuant to this offering and the accompanying warrants being offered in the concurrent private placement, which we refer to collectively as the Securities, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the U.S. Internal Revenue Service (the "IRS"), in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a holder of the Securities. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a position contrary to that discussed below regarding the tax consequences of the purchase, ownership and disposition of the Securities.

This discussion is limited to holders that hold the Securities as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income. In addition, it does not address consequences relevant to holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- persons holding the Securities as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, and other financial institutions;
- brokers, dealers or traders in securities;
- real estate investment trusts or regulated investment companies;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell the Securities under the constructive sale provisions of the Code;
- persons for whom our common stock constitutes "qualified small business stock" within the meaning of Section 1202 of the Code;
- persons that have a functional currency other than the U.S. dollar;
- persons that own, or are deemed to own, more than 5% of our capital stock (except to the extent specifically set forth below);
- persons who hold or receive the Securities pursuant to the exercise of any employee stock option or otherwise as compensation; and
- tax-qualified retirement plans.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds the Securities, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding the Securities and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF THE SECURITIES ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Allocation of Purchase Price

Each share of common stock and accompanying warrant will be treated for U.S. federal income tax purposes as an investment unit consisting of one share of our common stock and a warrant to purchase one share of our common stock. In determining their tax basis for the common stock and warrant constituting a unit, holders of Securities should allocate their purchase price for the unit between the common stock and the warrant on the basis of their relative fair market values at the time of issuance. A holder's allocation of purchase price between the common stock and the warrant is not binding on the IRS or the courts, and no assurance can be given that the IRS or the courts will agree with a holder's allocation. The Company does not intend to advise holders of the Securities with respect to this determination, and holders of the Securities are advised to consult their tax and financial advisors with respect to the relative fair market values of the common stock and the warrants for U.S. federal income tax purposes.

Tax Considerations Applicable to U.S. Holders

Definition of a U.S. Holder

For purposes of this discussion, a "U.S. Holder" is any beneficial owner of the Securities that, for U.S. federal income tax purposes, is:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more United States persons (within the meaning of Section 7701(a)(30) of the Code), or (2) has a valid election in effect under applicable Treasury Regulations to be treated as a United States person for U.S. federal income tax purposes.

Distributions

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions on our common stock, such distributions of cash or property on our common stock will constitute dividends to the extent paid out of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. Dividends on our common stock received by a corporate U.S. Holder may be eligible for a dividends received deduction, subject to applicable limitations. Dividends on our common stock received by certain non-corporate U.S. Holders, including individuals, are generally taxed at the lower applicable capital gains rate provided certain holding period and other requirements are satisfied. Distributions on our common stock in excess of our current and accumulated earnings and profits first will constitute a return of capital and be applied against and reduce a U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "--Tax Considerations Applicable to U.S. Holders-Sale, Exchange or Other Taxable Disposition of Common Stock or Warrants."

While it is not free from doubt, we expect that cash distributions paid on the warrants, on an "as-converted" basis, if any, are subject to substantially the same tax consequences as described in the preceding paragraph for common stock; however, distributions received in respect of a warrant may not qualify for the lower tax rates applicable to qualified dividend income. U.S. holders should consult their own tax advisors regarding the property treatment of any distributions paid on the warrants.

Sale, Exchange or Other Taxable Disposition of Common Stock or Warrants

Upon the sale, exchange or other taxable disposition of our common stock or warrants (other than by exercise of a warrant), a U.S. Holder generally will recognize capital gain or loss equal to the difference between (i) the amount of cash and the fair market value of any property received upon the sale, exchange or other taxable disposition and (ii) such U.S. Holder's adjusted tax basis in the common stock or warrant. Such capital gain or loss will be long-term capital gain or loss if the U.S. Holder's holding period in such common stock or warrant is more than one year at the time of the sale, exchange or other taxable disposition. Long-term capital gains recognized by certain non-corporate U.S. Holders, including individuals, generally will be subject to reduced rates of U.S. federal income tax. The deductibility of capital losses is subject to certain limitations.

Exercise or Expiration of Warrants

Except as discussed below with respect to a cashless exercise of a warrant, a U.S. Holder will not recognize income, gain or loss upon exercise of a warrant for its exercise price. A U.S. Holder's tax basis in a share of common stock received upon exercise of warrants will be equal to the sum of (i) the U.S. Holder's tax basis in the warrants exercised and (ii) the exercise price of such warrants. A U.S. Holder's holding period in the shares of common stock received upon exercise will commence on the day after such U.S. Holder exercises the warrants.

The tax consequences of a cashless exercise of a warrant are not clear under current U.S. tax law. A cashless exercise may be tax-free, either because the exercise is not a gain realization event or because the exercise is treated as a recapitalization for U.S. federal income tax purposes. In this case, a U.S. Holder's basis in the common stock received would equal the U.S. Holder's basis in the warrant. If the cashless exercise were treated as not being a realization event, the holding period of the common stock should commence on the day after the warrants are exercised. If the cashless exercise were treated as a recapitalization, the holding period of the common stock would include the holding period of the warrant.

It is possible that a cashless exercise could be treated in part as a taxable exchange in which gain or loss would be recognized with respect to the warrants surrendered to pay the exercise price for warrants converted into common stock. In that event, a U.S. Holder could be deemed to have surrendered only those warrants used to satisfy the exercise price for an amount equal to the aggregate fair market value of the exercise price of the total number of warrants to be exercised. The U.S. Holder would recognize capital gain or loss in an amount equal to the difference between the amount deemed realized and the U.S. Holder's tax basis in the warrants surrendered to pay the exercise price. In this case, a U.S. Holder's tax basis in the common stock received would equal the sum of the U.S. holder's initial investment in the converted warrants (*i.e.*, the portion of the U.S. Holder's purchase price allocated to the warrants, as described above) and the exercise price of the warrants converted. The U.S. Holder's holding period for the common stock would commence on the date following the date of exercise.

Due to the absence of authority on the U.S. federal income tax treatment of a cashless exercise, there can be no assurance which, if any, of the alternative tax consequences and holding periods described above would be adopted by the IRS or a court of law. Accordingly, U.S. holders should consult their own tax advisors regarding the tax consequences of a cashless exercise.

If a warrant expires without being exercised, a U.S. Holder generally will recognize a capital loss in an amount equal to such holder's tax basis in the warrant. Such loss will be long-term capital loss if, at the time of the expiration, the U.S. Holder's holding period in such warrant is more than one year.

Constructive Dividends on Warrants

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if at any time during the period in which a U.S. Holder holds warrants, we were to pay a taxable dividend to our stockholders and that decrease would be deemed to be the payment of a taxable dividend to a U.S. Holder of the warrants to the extent of our earnings and profits, notwithstanding the fact that such holder will not receive a cash payment. If the exercise price is adjusted in certain other circumstances (or in certain circumstances, there is a failure to make adjustments), such adjustments may also result in the deemed payment of a taxable dividend to a U.S. Holder. U.S. Holders should consult their tax advisors regarding the proper treatment of any adjustments to the exercise price of the warrants.

Information Reporting and Backup Withholding

A U.S. Holder may be subject to information reporting and backup withholding when such holder receives payments on the common stock or warrants (including constructive dividends) or receives proceeds from the sale or other taxable disposition of common stock or warrants. Certain U.S. Holders are exempt from backup withholding, including corporations and certain tax-exempt organizations. A U.S. Holder will be subject to backup withholding if such holder is not otherwise exempt and such holder:

- fails to furnish the holder's taxpayer identification number, which for an individual is ordinarily his or her social security number;
- furnishes an incorrect taxpayer identification number;
- is notified by the IRS that the holder previously failed to properly report payments of interest or dividends; or
- fails to certify under penalties of perjury that the holder has furnished a correct taxpayer identification number and that the IRS has not notified the holder that the holder is subject to backup withholding.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS. U.S. Holders should consult their tax advisors regarding their qualification for an exemption from backup withholding and the procedures for obtaining such an exemption.

Tax Considerations Applicable to Non-U.S. Holders

Definition of a Non-U.S. Holder

For purposes of this discussion, a "Non-U.S. Holder" is any Holder who is neither an entity treated as a partnership for U.S. federal income tax purposes nor a U.S. Holder.

Distributions

As described in the section entitled "Dividend Policy," we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts of distributions on our common stock not treated as dividends for U.S. federal income tax purposes first will constitute a return of capital and be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "Tax Considerations Applicable to Non-U.S. Holders-Sale or Other Taxable Disposition of Common Stock or Warrants." Subject to the discussion below on effectively connected income, dividends paid on our common stock to a Non-U.S. Holder will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid on our common stock to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that such dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends on our common stock, although not subject to U.S. withholding tax, will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

While it is not free from doubt, we expect that cash distributions paid on the warrants, on an “as-converted” basis, if any, are subject to the same tax consequences as described in the preceding paragraphs for the common stock. Non-U.S. Holders should consult their own tax advisors regarding the proper treatment of any distributions paid on the warrants.

Sale or Other Taxable Disposition of Common Stock or Warrants

Subject to the discussions below regarding backup withholding and foreign accounts, a Non-U.S. Holder generally will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our common stock or the warrants unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- the common stock or warrant constitutes a U.S. real property interest (“USRPI”) by reason of our status as a U.S. real property holding corporation (“USRPHC”) for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, (i) gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax if our common stock is “regularly traded,” as defined by applicable Treasury Regulations, on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period and (ii) gain arising from the sale or other taxable disposition by a non-U.S. Holder of a warrant generally will not be subject to U.S. federal income tax if our common stock is “regularly traded,” as defined by applicable Treasury Regulations, on an established securities market, and on the non-U.S. Holder's acquisition date for such warrants, the warrants held by such non-U.S. Holder had a fair market value equal to or less than the fair market value on that date of 5% of our common stock.

Non-U.S. Holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Exercise of Warrants

A non-U.S. Holder generally will not be subject to U.S. federal income tax on the exercise of warrants into shares of common stock. However, if a cashless exercise of warrants results in a taxable exchange, as described in “-Tax Considerations Applicable to U.S. Holders-Exercise or Expiration of Warrants,” the rules described above under “-Tax Considerations Applicable to Non-U.S. Holders-Sale or Other Disposition of Common Stock or Warrants” would apply.

Constructive Dividends on Warrants

As described in the section entitled “Dividend Policy,” we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if at any time during the period in which a non-U.S. Holder holds warrants we were to pay a taxable dividend to our stockholders and, in accordance with the anti-dilution provisions of the warrants, the exercise price of the warrants were decreased, that decrease would be deemed to be the payment of a taxable dividend to a

non-U.S. Holder to the extent of our earnings and profits, notwithstanding the fact that such holder will not receive a cash payment. If the exercise price is adjusted in certain other circumstances (or in certain circumstances, there is a failure to make adjustments), such adjustments may also result in the deemed payment of a taxable dividend to a non-U.S. Holder. Any resulting withholding tax attributable to deemed dividends may be collected from other amounts payable or distributable to the non-U.S. Holder. Non-U.S. Holders should consult their tax advisors regarding the proper treatment of any adjustments to the warrants.

Information Reporting and Backup Withholding

Payments of dividends on our common stock or warrants will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock or warrants paid to the Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock or warrants conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional Withholding Tax on Payments Made to Foreign Accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code (such Sections commonly referred to as the Foreign Account Tax Compliance Act, or "FATCA") on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on, or gross proceeds from the sale or other disposition of, our common stock or the warrants paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

The withholding provisions described above generally apply to payments (including deemed payments) of dividends on our common stock and warrants, and, subject to the recently released proposed Treasury Regulations described below, will apply to payments of gross proceeds from the sale or other disposition of our common stock and the warrants on or after January 1, 2019. The Treasury Department recently released proposed Treasury Regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our common stock and the warrants. In its preamble to such proposed Treasury Regulations, the Treasury Department stated that taxpayers may generally rely on the proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock and the warrants.

The preceding discussion of U.S. federal tax considerations is for general information only. It is not tax advice. Each prospective investor should consult its own tax advisor regarding the particular U.S. federal, state and local and non-

U.S. tax consequences of purchasing, holding and disposing of our common stock and the warrants, including the consequences of any proposed change in applicable laws.

PRIVATE PLACEMENT OF WARRANTS

In a concurrent private placement, we are issuing to purchasers of our common stock in this offering Warrants to purchase up to an aggregate of 4,318,272 shares of our common stock.

The Warrants and the shares of our common stock issuable upon the exercise of the Warrants are not being offered pursuant to this prospectus supplement and the accompanying prospectus. The Warrants are being offered pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and Rule 506(b) promulgated thereunder. Holders of the Warrants will have registration rights with respect to the shares of our common stock issuable upon the exercise of the Warrants as described in this prospectus supplement. Accordingly, purchasers may only sell shares of common stock issued upon exercise of the Warrants pursuant to an effective registration statement under the Securities Act covering the resale of those shares, an exemption under Rule 144 under the Securities Act or another applicable exemption under the Securities Act.

The Warrants are exercisable for five and one-half years beginning on the date of their issuance. The Warrants have an initial exercise price equal to \$2.13 per share, subject to certain adjustments.

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 and by payment in full in immediately available funds for the number of shares of common stock purchased upon such exercise. If a registration statement registering the issuance of the shares of common stock underlying the warrants under the Securities Act is not then effective or available, the holder may exercise the warrant through a cashless exercise, in whole or in part, in which case the holder would receive upon such exercise the net number of shares of common stock determined according to the formula set forth in the warrant. No fractional shares of common stock will be issued in connection with the exercise of a warrant. In lieu of fractional shares, we will either pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price or round up to the next whole share.

A holder will not have the right to exercise any portion of the warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% (or, at the election of the holder, 9.99%) of the number of shares of our stock outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the warrants. However, any holder may increase or decrease such percentage to any other percentage not in excess of 9.99% upon notice to us, provided that any increase in such percentage shall not be effective until 61 days after such notice to us.

In the event of a fundamental transaction, as described in the Warrants and generally including any reorganization, recapitalization or reclassification of our common stock, the sale, transfer or other disposition of all or substantially all of our properties or assets, our consolidation or merger with or into another person, the holders of the Warrants will be entitled to receive upon exercise of the Warrants the kind and amount of securities, cash or other property that the holders would have received had they exercised the Warrants immediately prior to such fundamental transaction. In addition, upon a fundamental transaction, the holder shall have the right to receive a payment in cash, or under certain circumstances in other consideration, from us at the Black Scholes value as described in the Warrants.

PLAN OF DISTRIBUTION

We have engaged H.C. Wainwright & Co., LLC, or Wainwright or the placement agent, to act as our exclusive placement agent to solicit offers to purchase the shares of our common stock offered by this prospectus supplement and the accompanying base prospectus. Wainwright is not purchasing or selling any such shares, nor is it required to arrange for the purchase and sale of any specific number or dollar amount of such shares, other than to use its “reasonable best efforts” to arrange for the sale of such shares by us. Therefore, we may not sell all of the shares of our common stock being offered. The terms of this offering were subject to market conditions and negotiations between us, Wainwright and prospective investors. Wainwright will have no authority to bind us by virtue of the engagement letter. We have entered into securities purchase agreements directly with the accredited investors who have agreed to purchase shares of our common stock in this offering. We will only sell to investors who have entered into securities purchase agreements.

Delivery of the shares of common stock offered hereby is expected to take place on or about May 1, 2019, subject to satisfaction of certain conditions.

We have agreed to pay the placement agent a cash commission equal to 7.0% of the aggregate gross proceeds of this offering, and we have also agreed to pay the placement agent a non-accountable expense allowance of \$35,000, up to \$25,000 for fees and expenses of legal counsel and other out-of-pocket expenses actually incurred in connection with this offering, and \$10,000 for clearing fees in connection with this offering. In addition, we have agreed to pay a management fee to the placement agent equal to 1% of the aggregate gross proceeds of this offering. In addition, we have agreed to issue to the placement agent, at the closing of this offering, warrants to purchase 5% of the number of shares of our common stock sold in this offering, or warrants to purchase up to 215,914 shares of our common stock. The placement agent warrants will have an exercise price equal to \$2.53125 per share, or 125% of the offering price per share, and a term equal to five years from the effective date of this offering. Neither the placement agent’s warrants nor the shares of our common stock issuable upon exercise thereof are being registered hereby. Pursuant to Rule 5110(g) of the Financial Industry Regulatory Authority, or FINRA, the placement agent’s warrants and any shares issued upon exercise thereof will 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 in this offering, except for (i) the transfer of any security by operation of law or by reason of our reorganization; (ii) the transfer of any security to any FINRA member firm participating in the 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) the transfer of any security 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) the transfer of any security 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.

The following table shows the per share and total cash fees we will pay to the placement agent in connection with the sale of our shares of common stock in this offering, assuming the purchase of all of the shares we are offering.

Per share	\$0.142
Total	\$612,115.06

□

We estimate the total expenses of this offering paid or payable by us, excluding the placement agent fees in the table above, will be approximately \$187,445. After deducting the fees due to the placement agent and our estimated expenses in connection with this offering, we expect the net proceeds from this offering will be approximately \$7.9 million.

The placement agent 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 sale of our shares of common stock offered hereby by it while acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. The placement agent will be required to comply with the requirements of the Securities Act and the Exchange Act, including, without limitation, Rule 10b-5 and Regulation M under the Exchange Act. These rules and regulations may limit the timing of purchases and sales of our

securities by the placement agent. Under these rules and regulations, the placement agent may not (i) engage in any stabilization activity in connection with our securities or (ii) 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.

Indemnification

We have agreed to indemnify the placement agent against certain actions taken or omitted by us or the indemnified parties in connection with our engagement of Wainwright, or otherwise relating to Wainwright's activities on our behalf under our engagement letter with Wainwright. We have also agreed to contribute to payments that Wainwright may be required to make in respect of such liabilities. In addition, we will indemnify the purchasers of shares of our common stock in this offering against liabilities arising out of or relating to any breach of any of the representations, warranties, covenants or agreements made by us in the securities purchase agreement or related documents, any action instituted against them with respect to the transactions contemplated by the securities purchase agreement, or in connection with any registration statement providing for the resale of the shares of common stock underlying the warrants to be issued to them in the concurrent private placement, subject to certain limitations as provided in the securities purchase agreement.

Other Relationships

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. However, except as disclosed in this prospectus supplement, we have no present arrangements with Wainwright for any further services. During the 180 days prior to the date hereof, we paid \$250,000 to Wainwright for advisory services.

Trading Market

Our common stock is listed on The Nasdaq Capital Market under the symbol "INNT."

LEGAL MATTERS

The validity of the common stock offered by this prospectus supplement and the accompanying prospectus will be passed upon for us by Smith, Anderson, Blount, Dorsett, Mitchell & Jernigan, L.L.P., Raleigh, North Carolina. The placement agent is being represented in connection with this offering by Ellenoff Grossman & Schole LLP, New York, New York.

EXPERTS

The consolidated financial statements of Monster Digital, Inc., as of December 31, 2017 and 2016, and for the years then ended, have been incorporated by reference herein and in the registration statement, which includes an explanatory paragraph relating to the Company's ability to continue as a going concern, in reliance upon the report of CohnReznick LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

Mayer Hoffman McCann P.C., our independent registered public accounting firm, has audited our balance sheets as of December 31, 2018 and 2017, and the related statements of operations and comprehensive loss, stockholders' deficit and cash flows for each of the two years in the period ended December 31, 2018, and the related notes, as set forth in their report, which report expresses an unqualified opinion and includes an explanatory paragraph relating to our ability to continue as a going concern. We have incorporated by reference the financial statements in this registration statement in reliance on the report of Mayer Hoffman McCann P.C. given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and other reports, proxy statements and 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>.

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 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 at our website at <http://www.innovatebiopharma.com>. Such information is made available on our website as soon as reasonably practicable after we electronically file it with or furnish it to the SEC. Information contained on, or accessible through, our website is not part of this prospectus supplement.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement the information we file with the SEC, which means we may disclose important information to you by referring you to other documents we file separately with the SEC. The information we incorporate by reference is considered a part of this prospectus supplement. We hereby incorporate by reference the following documents:

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 filed on March 18, 2019;
- our Current Reports on Form 8-K filed on January 11, 2019, February 19, 2019, March 13, 2019, March 18, 2019, March 19, 2019 (other than Item 2.02, Item 9.01 and Exhibit 99.1 thereto), April 26, 2019 and April 29, 2019; and
- the description of our common stock contained in our Registration Statement on Form 8-A as filed with the SEC on June 7, 2016 pursuant to Section 12(b) of the Exchange Act.

Any information in the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus supplement modifies or replaces such information. We also incorporate by reference any future filings (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until the termination of the offering of the shares of common stock covered by this prospectus supplement. Information in such future filings shall be deemed to update and supplement the information provided in this prospectus supplement, and any statements in such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that the statements in the later filed document modify or replace such earlier statements.

You may obtain from us copies of the documents incorporated by reference in this prospectus supplement, at no cost, by requesting them in writing or by telephone at:

Innovate Biopharmaceuticals, Inc.
8480 Honeycutt Road, Suite 120
Raleigh, NC 27615
(919) 275-1933

SUBJECT TO COMPLETION, DATED JULY 13, 2018

PROSPECTUS



Common Stock

**Up to \$175,000,000 of
Shares of Common Stock
13,990,403 Shares of Common Stock
Offered by Selling Stockholders**

We may offer and sell from time to time, in one or more series or issuances and on terms that we will determine at the time of the offering, any of the securities described in this prospectus, up to an aggregate maximum amount of \$175,000,000.

This prospectus also relates to the disposition from time to time of up to 13,990,403 shares of our common stock (including up to 2,051,771 shares issuable upon exercise of warrants), which are held by the selling stockholders named in this prospectus. We will not receive any of the proceeds from the sale of our common stock by the selling stockholders.

The selling stockholders identified in this prospectus, or their permitted transferees or other successors-in-interest, may offer the shares from time to time through public or private transactions at prevailing market prices, at prices related to prevailing market prices, or at privately negotiated prices. We provide additional information about how the selling stockholders may sell their shares of common stock in the section entitled "Plan of Distribution" beginning on page [16](#) of this prospectus. We will not be paying any underwriting discounts or selling commissions in connection with any offering of common stock under this prospectus.

Our common stock is quoted on the Nasdaq Capital Market ("Nasdaq") under the symbol "INNT." The last reported sale price of our common stock as reported on Nasdaq on July 5, 2018 was \$22.71 per share.

Investing in our common stock involves a high degree of risk. Please see the section entitled "Risk Factors" beginning on page [3](#) of this prospectus.

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.

The date of this prospectus is July 13, 2018.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the United States Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf process, we may, from time to time, sell any of the securities described in this prospectus in one or more offerings up to an aggregate dollar amount of \$175,000,000 (of which up to an aggregate of \$40 million may be sold in an “at-the-market” offering as defined in Rule 415 of the Securities Act). In addition, the selling stockholders may from time to time sell up to an aggregate amount of 13,990,403 shares of our common stock (including up to 2,051,771 shares issuable upon exercise of warrants) in one or more offerings.

This prospectus provides you with a general description of the securities we or the selling stockholders may offer. Each time we or the selling stockholders 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 to, update or change information contained in the prospectus and, accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information in that prospectus supplement. You should carefully read both this prospectus and any prospectus supplement together with the additional information described under the heading “Information Incorporated by Reference.”

The prospectus supplement to be attached to the front of this prospectus may describe, as applicable, the terms of the securities offered; the price paid for the securities; net proceeds; and the other specific terms related to the offering of the securities.

THIS PROSPECTUS MAY NOT BE USED TO OFFER AND SELL SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement or issuer free writing prospectus relating to a particular offering. No person has been authorized to give any information or make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus, any accompanying prospectus supplement and any related issuer free writing prospectus in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither this prospectus nor any prospectus supplement nor any related issuer free writing prospectus shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits.

You should read the entire prospectus and any prospectus supplement and any related issuer free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement or any related issuer free writing prospectus, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement or any issuer free writing prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement or issuer free writing prospectus is correct as of any date subsequent to the date hereof or of such prospectus supplement or issuer free writing prospectus, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

Except where the context otherwise requires or where otherwise indicated, the terms “we,” “us,” “our,” “Innovate” and “the Company” refer to Innovate Biopharmaceuticals, Inc., a Delaware corporation, and its consolidated subsidiaries. References

to the “selling stockholders” refer to the stockholders listed herein under the heading “Selling Stockholders” and their donees, pledgees, transferees or other successors-in-interest.

FORWARD-LOOKING STATEMENTS

The information in this Registration Statement on Form S-3, particularly in the sections entitled “Innovate Business,” and “Innovate Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and the information incorporated herein by reference, include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements are based on current expectations and beliefs and involve numerous risks and uncertainties that could cause actual results to differ materially from expectations. These forward-looking statements should not be relied upon as predictions of future events as we cannot assure you that the events or circumstances reflected in these statements will be achieved or will occur. When used in this report, the words “believe,” “may,” “could,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect,” “indicate,” “seek,” “should,” “would” and similar expressions are intended to identify forward-looking statements, though not all forward-looking statements contain these identifying words. All statements, other than statements of historical fact, are statements that could be deemed forward-looking statements.

If any of these risks or uncertainties materializes or any of these assumptions proves incorrect, our results could differ materially from the forward-looking statements in this report. All forward-looking statements in this report are current only as of the date of this report. We do not undertake any obligation to publicly update any forward-looking statement to reflect events or circumstances after the date on which any statement is made or to reflect the occurrence of unanticipated events except as required by law.

PROSPECTUS SUMMARY

This summary highlights the information contained elsewhere in or incorporated by reference into this prospectus. Because this is only a summary, it does not contain all of the information that you should consider before deciding whether to invest in our securities. For a more complete understanding of our company's business and the risks and uncertainties facing it, you should read this entire prospectus, including but not limited to the information incorporated by reference herein and under the caption "Risk Factors," beginning on page [3](#).

Overview

On January 29, 2018, Monster Digital, Inc. ("Monster") and privately held Innovate Biopharmaceuticals Inc. ("Private Innovate") completed a reverse recapitalization in accordance with the terms of the Agreement and Plan of Merger and Reorganization, dated July 3, 2017, as amended (the "Merger Agreement"), by and among Monster, Monster Merger Sub, Inc. ("Merger Sub") and Private Innovate, which changed its name in connection with the transaction to IB Pharmaceuticals Inc. ("IB Pharmaceuticals"). Pursuant to the Merger Agreement, Merger Sub merged with and into IB Pharmaceuticals with IB Pharmaceuticals surviving as the wholly owned subsidiary of Monster (the "Merger"). Immediately following the Merger, Monster changed its name to Innovate Biopharmaceuticals, Inc. ("Innovate"). In connection with the closing of the Merger, Innovate's common stock began trading on the Nasdaq Capital Market under the ticker symbol "INNT" on February 1, 2018. Prior to the Merger, Monster was incorporated in Delaware in November 2010 under the name "Monster Digital, Inc."

Prior to the Merger, Monster's primary business focus was the design, development and marketing of premium products under the "Monster Digital" brand for use in high-performance consumer electronics, mobile products and computing applications.

After the Merger, we are a clinical-stage biopharmaceutical company developing novel medicines for autoimmune and inflammatory diseases with unmet needs. Our pipeline includes drug candidates for celiac disease, nonalcoholic steatohepatitis (NASH), Crohn's and ulcerative colitis. Our lead program, INN-202 (larazotide acetate or larazotide) is entering Phase 3 registration trials in the second half of 2018 and has the potential to be the first-to-market therapeutic for celiac disease, an unmet medical need, which affects an estimated 1% of the North American population or approximately 3 million individuals. Celiac patients have no treatment alternative other than a strict lifelong adherence to a gluten-free diet, which is difficult to maintain and can be deficient in key nutrients. Additionally, current FDA labeling standards allow up to 20 parts per million (ppm) of gluten in "gluten-free" labeled foods, which are sufficient to cause celiac symptoms in many patients, including abdominal pain, abdominal cramping, bloating, gas, headaches, ataxia, "brain fog," and fatigue. Long-term sequelae of celiac disease include enteropathy associated T-cell lymphoma (EATL), osteoporosis and anemia.

Our principal executive office is currently located at 8480 Honeycutt Road, Suite 120, Raleigh, North Carolina 27615.

THE OFFERING

Common stock offered by the selling stockholders	13,990,403 shares of our common stock (including up to 2,051,771 shares issuable upon exercise of warrants)
Common stock offered by Innovate	Shares of our common stock having an aggregate offering price of up to \$175,000,000.
Use of proceeds	<p>Unless otherwise set forth in a prospectus supplement, we currently intend to use the net proceeds of any offering of securities for working capital and other general corporate purposes. Accordingly, we will have significant discretion in the use of any net proceeds. The specific allocations of the proceeds we receive from the sale of our securities will be described in the applicable prospectus supplement.</p> <p>We will not receive any proceeds from the sale of shares of our common stock by the selling stockholders.</p> <p>See “Selling Stockholders” and “Plan of Distribution.”</p>
Risk Factors	See “Risk Factors” and other information included in this prospectus for a discussion of factors you should consider carefully before deciding to invest in shares of our common stock.
Nasdaq symbol	INNT

RISK FACTORS

Before you invest in our securities, you should be aware that our business faces numerous financial and market risks, including those described below, as well as general economic and business risks. Our securities are speculative, and you should not make an investment in Innovate unless you can afford to bear the loss of your entire investment. Prior to making a decision about investing in our common stock, you should carefully consider the risks, uncertainties and assumptions discussed under Item 1A, "Risk Factors," in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, as updated by our subsequent filings with the Securities and Exchange Commission, or the SEC, under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are incorporated herein by reference, together with the information in this prospectus and any other information incorporated by reference into this prospectus. Before you decide whether to invest in our securities, you should carefully consider these risks and uncertainties, together with all of the other information included in or incorporated by reference into this prospectus. The risks and uncertainties identified are not the only risks and uncertainties we face. If any of the material risks or uncertainties that we face were to occur, you could lose part or all of your investment.

USE OF PROCEEDS

Unless otherwise set forth in a prospectus supplement, we currently intend to use the net proceeds of any offering of securities for working capital and other general corporate purposes. Accordingly, we will have significant discretion in the use of any net proceeds. The specific allocations of the proceeds we receive from the sale of our securities will be described in the applicable prospectus supplement.

We will not receive any proceeds from the sale of shares of our common stock by the selling stockholders.

SELLING STOCKHOLDERS

The shares may be offered by the selling stockholders or by pledges, donees, transferees or other successors in interest that receive such shares as a gift or through a private sale or transfer. We may amend or supplement this prospectus from time to time to update information provided in the table.

On January 29, 2018, prior to the closing of the Merger, Private Innovate issued to the selling stockholders 31,678,964 shares of common stock at \$0.9609 per share and five-year warrants to purchase 3,774,039 shares of common stock at an exercise price of \$1.201125 for aggregate gross proceeds of \$18,132,660.50 (the "Equity Issuance"). Certain of the warrants were issued to affiliates of H.C. Wainwright & Co., LLC and GP Nurmenkari Inc., the placement agents for the Equity Issuance. The shares were exchanged in connection with the Merger for 11,938,632 shares of common stock. The warrants were exchanged in connection with the Merger for warrants to purchase 2,051,771 shares of common stock.

On January 29, 2018, Monster and Private Innovate completed a reverse recapitalization in accordance with the terms of the Merger Agreement, by and among Monster, Merger Sub and Private Innovate, which changed its name in connection with the transaction to IB Pharmaceuticals Inc. Pursuant to the Merger Agreement, Merger Sub merged with and into IB Pharmaceuticals with IB Pharmaceuticals surviving as the wholly owned subsidiary of Monster. Immediately following the Merger, Monster changed its name to Innovate Biopharmaceuticals, Inc. In connection with the closing of the Merger, Innovate's common stock began trading on the Nasdaq Capital Market under the ticker symbol "INNT" on February 1, 2018.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions, or any public offering. The Registrant believes these transactions were exempt from registration under the Securities Act in reliance upon Section 4(a)(2) of the Securities Act or Regulation D promulgated under the Securities Act as transactions by an issuer not involving any public offering. The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were placed upon the stock certificates issued in these transactions. All recipients had adequate access, through their relationships with Monster or Private Innovate (as applicable) or otherwise, to information about Monster or Private Innovate (as applicable).

Selling Stockholder	Shares beneficially owned prior to offering	Number of shares being offered	Shares beneficially owned after offering	Percentage of outstanding shares beneficially owned after offering(1)
Adolfo & Donna Carmona(2)	52,635	52,635	—	*
Alan McIntyre(3)	23,561	23,561	—	*
Alexander J. Brown Trust(4)	34,200	34,200	—	*
Alexandra Koeppel(5)	23,532	23,532	—	*
Andrew and Melissa Fisher(6)	47,064	47,064	—	*
Argjent Mena & Lara Sabani(7)	9,413	9,413	—	*
B3 Group LLC(8)	470,642	470,642	—	*
Barry Shemaria(9)	14,120	14,120	—	*
Basil Palmeri(10)	14,120	14,120	—	*
Bozarth LLC(11)	23,532	23,532	—	*
Brenda & Dave Rickey Family Foundation(12)	16,473	16,473	—	*

Brian & Andrea Fischhoff(13)	11,765	11,765	—	*
Brian Eliot Peierls(14)	56,477	56,477	—	*
Bruce & Mitsie Levy(15)	23,532	23,532	—	*
Carl J. Domino(16)	47,064	47,064	—	*
Casimir S. Skrzypczak(17)	16,473	16,473	—	*
Charmi Vijapura(18)	47,064	47,064	—	*
Chirag Shah(19)	7,059	7,059	—	*
Christopher Washburn(20)	14,120	14,120	—	*
Clay Lebhar(21)	23,531	23,531	—	*
Dennis R. DeLoach, Jr. & Faye M. DeLoach(22)	11,766	11,766	—	*
Donald Sesterhenn(23)	11,765	11,765	—	*
Douglas Rivers(24)	235,321	235,321	—	*
Dyke Rogers(25)	94,128	94,128	—	*
E. Jeffrey Peierls(26)	70,596	70,596	—	*
Edward O'Connell(27)	9,413	9,413	—	*
Edward P. Swyer LLC(28)	235,321	235,321	—	*
Foster Family Trust(29)	23,532	23,532	—	*
FourJr Investments LTD(30)	23,532	23,532	—	*
Frederick B. Epstein(31)	11,766	11,766	—	*
GSB Holdings, Inc.(32)	235,321	235,321	—	*
Gubbay Investments, LLC(33)	16,507	16,507	—	*
Gwen Swenson-Hale(34)	11,765	11,765	—	*
Howard & Susan Kalka(35)	35,328	35,328	—	*
Howard Stringer(36)	11,766	11,766	—	*
Intracoastal Capital, LLC(37)	47,064	47,064	—	*
Iroquois Capital Investment Group LLC(38)	28,238	28,238	—	*
Iroquois Master Fund Ltd(39)	89,422	89,422	—	*
Irwin Gruverman(40)	11,765	11,765	—	*
Jai V. Desai(41)	14,119	14,119	—	*
James H. Wiesenberg(42)	11,765	11,765	—	*
James J. Watson(43)	23,532	23,532	—	*
James L. Dritz(44)	18,826	18,826	—	*
Jan Arnett(45)	47,064	47,064	—	*
Jay M. Haft(46)	11,766	11,766	—	*
Jayesh K. Patel & Bela J. Patel(47)	47,064	47,064	—	*
Jesal Kothari(48)	7,059	7,059	—	*
Jimmy R. Hasley(49)	14,120	14,120	—	*
Joan L Bonanno TTE U/A DTD 12/05/2002 By Joan L Bonanno(50)	47,064	47,064	—	*
John Q Joubert & Terri L Joubert(51)	47,064	47,064	—	*
John E. Kyees(52)	11,766	11,766	—	*
John V. Wagner, Jr.(53)	35,298	35,298	—	*

Juli-Ann Cialone(54)	4,707	4,707	—	*
Kara Lynn Hart(55)	11,765	11,765	—	*
Keith J. Gelles(56)	23,532	23,532	—	*
Lars Bader(57)	470,642	470,642	—	*
Lee J. Seidler Revocable Trust DTD 4/12/1990(58)	23,561	23,561	—	*
Mackie Klingbeil(59)	23,561	23,561	—	*
Mahendra Doobay(60)	4,706	4,706	—	*
Meryle Evans Family Trust(61)	11,766	11,766	—	*
Michael J. Pierce(62)	94,128	94,128	—	*
Michael M. Mainero(63)	11,766	11,766	—	*
Michael Stark(64)	11,765	11,765	—	*
MITZ ZHU YAN,LP(65)	23,532	23,532	—	*
N. Michael Wolsonovich, Jr.(66)	7,060	7,060	—	*
Nomis Bay LTD(67)	1,411,924	1,411,924	—	*
Northlea Partners LLLP(68)	11,765	11,765	—	*
OHB Family Trust(69)	23,532	23,532	—	*
Pamela M. Baker & Russell S. Baker(70)	23,532	23,532	—	*
Peter S. Kastner(71)	23,532	23,532	—	*
Provident Trust Group LLC FBO Universal Technology Inc. 401K Plan FBO Robert G. Curtin(72)	135,671	135,671	—	*
Rameshchandra Dabhi(73)	23,531	23,531	—	*
Raphael Tshibangu(74)	18,826	18,826	—	*
Raymond J Bonanno TTE U/A DTD 12/05/2002 By Raymond J Bonanno(75)	47,064	47,064	—	*
Renald J. & Catherine C. Anelle(76)	23,561	23,561	—	*
Richard A Brown Trust(77)	81,403	81,403	—	*
Richard David(78)	23,532	23,532	—	*
Rickey Family Trust dtd 3/22/16(79)	30,592	30,592	—	*
Robert Caione(80)	23,532	23,532	—	*
Robert G. Curtin(81)	4,975	4,975	—	*
Robert Harrigan(82)	26,316	26,316	—	*
RS & VS LTD(83)	11,765	11,765	—	*
RS Irrevocable Trust(84)	235,321	235,321	—	*
Russell S. Dritz(85)	7,060	7,060	—	*
Saha Living LLC(86)	47,064	47,064	—	*
Sal DeStefano(87)	11,765	11,765	—	*
Satterfield Vintage Investments, LP(88)	117,673	117,673	—	*
SDL Ventures, LLC(89)	141,192	141,192	—	*
Sphera Global Healthcare Master Fund(90)	1,142,717	1,142,717	—	*
HFR HE Sphera Global Healthcare Master Trust (91)	33,886	33,886	—	*
Stephen A. DiChiara(92)	7,059	7,059	—	*

Steven M. Cohen(93)	18,826	18,826	—	*
Suresh Patel(94)	11,765	11,765	—	*
The Fourys Co. LTD(95)	37,652	37,652	—	*
The Peierls Bypass Trust(96)	6,588	6,588	—	*
The Peierls Foundation, Inc.(97)	316,271	316,271	—	*
UD E.F. Peierls for Brian E. Peierls(98)	24,473	24,473	—	*
UD E.F. Peierls for E. Jeffrey Peierls(99)	24,473	24,473	—	*
UD E.S. Peierls for E.F. Peierls et al(100)	16,943	16,943	—	*
UD Ethel F. Peierls Charitable Lead Trust(101)	37,651	37,651	—	*
UD J.N. Peierls for Brian Eliot Peierls(102)	31,063	31,063	—	*
UD J.N. Peierls for E. Jeffrey Peierls(103)	31,063	31,063	—	*
UKR Partners LLC(104)	1,579,559	1,579,559	—	*
UW E.S. Peierls for Brian E. Peierls - Accumulation(105)	22,590	22,590	—	*
UW E.S. Peierls for E. Jeffrey Peierls - Accumulation(106)	13,177	13,177	—	*
UW J.N. Peierls for Brian E. Peierls(107)	27,297	27,297	—	*
UW J.N. Peierls for E. Jeffrey Peierls(108)	27,297	27,297	—	*
Vijay & Tejal Patel(109)	117,659	117,659	—	*
Valley Forge Investments LLC(110)	94,128	94,128	—	*
Walter G. Gans(111)	7,060	7,060	—	*
Yisroel Brauner & Chana Brauner(112)	23,532	23,532	—	*
Amit Patel	69,267	69,267	—	*
Anthony Barrett	58,869	58,869	—	*
Ashit Vijapura	80,298	80,298	—	*
Ashwin N. Patel & Achala A. Patel	107,065	107,065	—	*
Atul and Namrata Wadhwa	41,346	41,346	—	*
Bearing Circle Capital LLC	109,242	109,242	—	*
Bhavesh Patel	14,229	14,229	—	*
Bhikabhai Nayi	13,104	13,104	—	*
Bijal Patel	15,728	15,728	—	*
Bindu Sangani	80,344	80,344	—	*
Charles Mosseri-Marlio	153,442	153,442	—	*
David Cassimus	13,836	13,836	—	*
David Purdy	74,800	74,800	—	*
Deepen R. Patel	5,423	5,423	—	*
Himanshu M. Patel	51,511	51,511	—	*
Hiren K. Patel	27,784	27,784	—	*
Howard Yee	20,578	20,578	—	*
Naillesh Sangani	132,051	132,051	—	*
Janet League Katzin	222,555	222,555	—	*
Jay Madan	6,839	6,839	—	*

Jigar J. Patel	7,939	7,939	—	*
Jonathan Barrett	162,065	162,065	—	*
JRK Inc.	27,419	27,419	—	*
Juan Vallarino	60,044	60,044	—	*
Justin Prior	15,554	15,554	—	*
Karl Pinto	14,972	14,972	—	*
Kumar Patel	68,500	68,500	—	*
Malika Sangani	53,002	53,002	—	*
Malur R. Balaji	53,522	53,522	—	*
Marilyn Hemani	40,276	40,276	—	*
Mary Cheeran	53,532	53,532	—	*
Michael Mindlin	60,297	60,297	—	*
Nalini Krishnankutty	13,385	13,385	—	*
Niranjana Patel	8,135	8,135	—	*
ONE by NP	26,358	26,358	—	*
Parul T. Patel	53,532	53,532	—	*
Piyush Patel	26,761	26,761	—	*
Praful Patel	106,507	106,507	—	*
Prentice Lending II LLC	695,562	695,562	—	*
Raj S. Shah	13,104	13,104	—	*
Rajesh and Suny Patel	27,799	27,799	—	*
Rajesh B. Patel	68,460	68,460	—	*
Rakesh Shah	80,621	80,621	—	*
Rameshchandra Dabhi	105,951	105,951	—	*
Ramesh Donthamsetty	30,689	30,689	—	*
Rathin Patel	13,906	13,906	—	*
Saurabh Shah	14,214	14,214	—	*
SDS Capital Partners II, LLC	262,924	262,924	—	*
Sebastian Prior	15,554	15,554	—	*
Shuchin Bajaj	5,693	5,693	—	*
Sireesh Appajosyula	30,689	30,689	—	*
Subhashini Chandran	5,692	5,692	—	*
Sujata Shah	53,522	53,522	—	*
Sunil and Prity Vaidya	80,298	80,298	—	*
Sunil Kumar S. Reddy	26,761	26,761	—	*
Todd Gallinek	8,536	8,536	—	*
Vijay Patel & Mrs. Tejal Patel	106,312	106,312	—	*
Vijay Taunk	53,522	53,522	—	*
Vikram Patel	80,750	80,750	—	*
Wallace R. Nelms	22,768	22,768	—	*
Aaron Segal(113)	115,501	115,501	—	*

David Landskowsky(114)	74,158	74,158	—	*
Eric Rubenstein(115)	74,158	74,158	—	*
Todd Harrigan(116)	60,419	60,419	—	*
Tim Herrmann(117)	30,387	30,387	—	*
Scott Cardone(118)	18,612	18,612	—	*
Albert Pezone(119)	29,363	29,363	—	*
Steven Nicholson(120)	8,471	8,471	—	*
Kimberly Bechtle(121)	3,677	3,677	—	*
Lindsey McGrandy(122)	2,680	2,680	—	*
Richard Mish(123)	2,038	2,038	—	*
Michael Vasinkevich(124)	141,718	141,718	—	*
Sean Hagerty(125)	39,891	39,891	—	*
Noam Rubinstein(126)	26,244	26,244	—	*
Charles Worthman(127)	2,100	2,100	—	*
Total	13,990,403			

* Less than 1%

- (1) Based upon 25,695,602 shares of common stock outstanding as of the close of business on July 5, 2018 (the “Measurement Date”) in accordance with Rule 13d-3 under the Securities Exchange Act of 1934.
- (2) Shares beneficially owned includes a warrant to purchase 8,773 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (3) Shares beneficially owned includes a warrant to purchase 3,927 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (4) Shares beneficially owned includes a warrant to purchase 5,700 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (5) Shares beneficially owned includes a warrant to purchase 3,922 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (6) Shares beneficially owned includes a warrant to purchase 7,844 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (7) Shares beneficially owned includes a warrant to purchase 1,569 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (8) Shares beneficially owned includes a warrant to purchase 78,441 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (9) Shares beneficially owned includes a warrant to purchase 2,354 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (10) Shares beneficially owned includes a warrant to purchase 2,354 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (11) Shares beneficially owned includes a warrant to purchase 3,922 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (12) Shares beneficially owned includes a warrant to purchase 2,746 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (13) Shares beneficially owned includes a warrant to purchase 1,961 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (14) Shares beneficially owned includes a warrant to purchase 9,413 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.

- (15) Shares beneficially owned includes a warrant to purchase 3,922 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (16) Shares beneficially owned includes a warrant to purchase 7,844 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (17) Shares beneficially owned includes a warrant to purchase 2,746 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (18) Shares beneficially owned includes a warrant to purchase 7,844 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (19) Shares beneficially owned includes a warrant to purchase 1,177 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (20) Shares beneficially owned includes a warrant to purchase 2,354 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (21) Shares beneficially owned includes a warrant to purchase 3,922 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (22) Shares beneficially owned includes a warrant to purchase 1,961 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (23) Shares beneficially owned includes a warrant to purchase 1,961 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (24) Shares beneficially owned includes a warrant to purchase 39,221 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (25) Shares beneficially owned includes a warrant to purchase 15,688 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (26) Shares beneficially owned includes a warrant to purchase 11,766 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (27) Shares beneficially owned includes a warrant to purchase 1,569 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (28) Shares beneficially owned includes a warrant to purchase 39,221 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (29) Shares beneficially owned includes a warrant to purchase 3,922 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (30) Shares beneficially owned includes a warrant to purchase 3,922 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (31) Shares beneficially owned includes a warrant to purchase 1,961 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (32) Shares beneficially owned includes a warrant to purchase 39,221 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (33) Shares beneficially owned includes a warrant to purchase 2,752 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (34) Shares beneficially owned includes a warrant to purchase 1,961 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (35) Shares beneficially owned includes a warrant to purchase 5,888 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (36) Shares beneficially owned includes a warrant to purchase 1,961 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (37) Shares beneficially owned includes a warrant to purchase 7,844 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase. Mitchell P. Kopin (“Mr. Kopin”) and Daniel B. Asher (“Mr. Asher”), each of whom are managers of Intracoastal Capital LLC (“Intracoastal”), have shared voting control and investment discretion over the securities reported herein that are held by Intracoastal. As a result, each of Mr. Kopin and Mr. Asher may be deemed to have beneficial ownership (as determined under Section 13(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) of the securities reported herein that are held by Intracoastal.
- (38) Shares beneficially owned includes a warrant to purchase 4,707 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (39) Shares beneficially owned includes a warrant to purchase 14,904 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.

- (121) Shares beneficially owned includes a warrant to purchase 3,677 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (122) Shares beneficially owned includes a warrant to purchase 2,680 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (123) Shares beneficially owned includes a warrant to purchase 2,038 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (124) Shares beneficially owned includes a warrant to purchase 141,718 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (125) Shares beneficially owned includes a warrant to purchase 39,891 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (126) Shares beneficially owned includes a warrant to purchase 26,244 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.
- (127) Shares beneficially owned includes a warrant to purchase 2,100 shares of our common stock, which is fully exercisable for up to five (5) years from the date of purchase.

PLAN OF DISTRIBUTION

We and/or the selling stockholders, if applicable, may sell the securities offered through this prospectus (1) to or through underwriters or dealers, (2) directly to purchasers, including our affiliates, (3) through agents, or (4) 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 relating to any offering will include the following information:

- the terms of the offering;
- the names of any underwriters or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- the net proceeds from the sale of the securities;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any commissions paid to agents.

Sale through Underwriters or Dealers

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 price and any discounts or concessions allowed or reallocated or paid to dealers. The prospectus supplement will include the names of the principal underwriters the respective amount of securities underwritten, the nature of the obligation of the underwriters to take the securities and the nature of any material relationship between an underwriter and us.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities offered pursuant to this prospectus.

If dealers are used in the sale of securities offered through this prospectus, we or the selling stockholders 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 Agents

We or the selling stockholders may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved. Such securities may also be sold through agents 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 by us or the selling stockholders. 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 or the selling stockholders 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.

At-the-Market Offerings

To the extent that we make sales through one or more underwriters or agents in at-the-market offerings, we will do so pursuant to the terms of a sales agency financing agreement or other at-the-market offering arrangement between us, on one hand, and the underwriters or agents, on the other. If we engage in at-the-market sales pursuant to any such agreement, we will issue and sell our securities through one or more underwriters or agents, which may act on an agency basis or a principal basis. During the term of any such agreement, we may sell securities on a daily basis in exchange transactions or otherwise as we agree with the underwriters or agents. Any such agreement will provide that any securities sold will be sold at prices related to the then prevailing market prices for our securities. Therefore, exact figures regarding proceeds that will be raised or commissions to be paid cannot be determined at this time. Pursuant to the terms of the agreement, we may agree to sell, and the relevant underwriters or agents may agree to solicit offers to purchase blocks of our common stock or other securities. The terms of any such agreement will be set forth in more detail in the applicable prospectus or prospectus supplement.

Delayed Delivery Contracts

If the prospectus supplement indicates, we or the selling stockholders may authorize agents, 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.

Derivative Transactions and Hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sale transactions and other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may effect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others. The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities.

Electronic Auctions

We or the selling stockholders may also make sales through the Internet or through other electronic means. Since we or the selling stockholders may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you should pay particular attention to the description of that system we will provide in a prospectus supplement. Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called "real-time" basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated

or rejected. For example, in the case of a debt security, the clearing spread could be indicated as a number of “basis points” above an index treasury note. Of course, many pricing methods can and may also be used.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

Rule 144

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that it meets the criteria and conforms to the requirements of that rule.

The selling stockholders and any broker-dealers that act in connection with the sale of securities may be deemed to be “underwriters” within the meaning of Section 2(11) of the Securities Act in connection with such sales, and any commissions received by such broker-dealers and any profit on the resale of the securities sold by them while acting as principals may be deemed to be underwriting discounts or commissions under the Securities Act. In the event that any selling stockholder is deemed to be an “underwriter” within the meaning of Section 2(11) of the Securities Act, such selling stockholder will be subject to the prospectus delivery requirements of the Securities Act. We and the selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

General Information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us or the selling stockholders against certain liabilities, including liabilities under the Securities Act. Agents, dealers, and underwriters may engage in transactions with or perform services for us in the ordinary course of their businesses.

DESCRIPTION OF CAPITAL STOCK

This section summarizes our authorized and outstanding securities and certain of the provisions of our amended and restated certificate of incorporation and our amended and restated bylaws.

General

The Company’s authorized capital stock consists of 360,000,000 shares of capital stock, par value \$0.0001 per share, of which 350,000,000 shares are common stock, par value \$0.0001 per share and 10,000,000 of preferred stock, par value \$0.0001. As of July 5, 2018, the Company had 25,695,602 shares of common stock outstanding held by approximately 341 shareholders of record, and no shares of preferred stock outstanding.

Common Stock

The holders of our common stock (i) have equal ratable rights to dividends from funds legally available, therefore, when, as and if declared by our Board; (ii) are entitled to share in all of our assets available for distribution to holders of common stock upon liquidation, dissolution or winding up of our affairs; (iii) do not have preemptive, subscription or conversion rights and there are no redemption or sinking fund provisions or rights; and (iv) are entitled to one non-cumulative vote per share on all matters on which stockholders may vote. Reference is made to the Company’s Amended and Restated Certificate of Incorporation, Amended and Restated Bylaws, and the applicable statutes of the State of Delaware for a more complete description of the rights and liabilities of holders of the Company’s securities.

Preferred Stock

The Company has authorized 10,000,000 shares of preferred stock. There is no preferred stock outstanding.

Non-cumulative Voting

Holders of shares of our common stock do not have cumulative voting rights; meaning that the holders of 50.1% of the outstanding shares, voting for the election of directors, can elect all of the directors to be elected, and, in such event, the holders of the remaining shares will not be able to elect any of our directors.

Dividends

We have not paid any cash dividends to stockholders. The declaration of any future cash dividend will be at the discretion of our Board and will depend upon our earnings, if any, our capital requirements and financial position, our general economic conditions, and other pertinent conditions. It is our present intention not to pay any cash dividends in the foreseeable future, but rather to reinvest earnings, if any, in our business operations.

Warrants

As of the date of this registration statement, the Company has warrants outstanding, which entitle their holders to purchase (i) 1,702,216 shares of common stock, with a term of five years and an exercise price of \$3.18 per share, and (ii) 349,555 shares of common stock, with a term of five years and an exercise price of \$2.54 per share. Such warrants contain certain customary exceptions, as well as customary provisions for adjustment in the event of stock splits, subdivision or combination, mergers, and similar business combinations.

Anti-Takeover Effects of Certain Provisions of Delaware Law and Charter and Bylaw Provisions

Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws could discourage potential acquisition proposals and could delay or prevent a change in control. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our board of directors and in the policies formulated by our board of directors and to discourage certain types of transactions that may involve an actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our Common Stock that could result from actual or rumored takeover attempts. Such provisions also may have the effect of preventing changes in our management or delaying or preventing a transaction that might benefit you or other minority stockholders.

Certain Limitations on Stockholder Actions. Our bylaws will also impose some procedural requirements on stockholders who wish to:

- make nominations in the election of directors;
- propose that a director be removed;
- propose any repeal or change in our bylaws; or
- propose any other business to be brought before an annual or special meeting of stockholders.

Under these procedural requirements, in order to bring a proposal before a meeting of stockholders, a stockholder must deliver timely notice of a proposal pertaining to a proper subject for presentation at the meeting to our corporate secretary along with the following:

- a description of the business or nomination to be brought before the meeting and the reasons for conducting such business at the meeting;
- the stockholder's name and address;

- any material interest of the stockholder in the proposal;
- the number of shares beneficially owned by the stockholder and evidence of such ownership; and
- the names and addresses of all persons with whom the stockholder is acting in concert and a description of all arrangements and understandings with those persons, and the number of shares such persons beneficially own.

To be timely, a stockholder must generally deliver notice not less than 90 days prior the anniversary date of the immediately preceding annual meeting of stockholders.

In order to submit a nomination for our board of directors, a stockholder must also submit any information with respect to the nominee that we would be required to include in a proxy statement, as well as some other information. If a stockholder fails to follow the required procedures, the stockholder's proposal or nominee will be ineligible and will not be voted on by our stockholders.

LEGAL MATTERS

The validity of the shares of common stock offered by this prospectus and other legal matters will be passed upon for us by Wilson Sonsini Goodrich & Rosati, PC, San Diego, California. Additional legal matters may be passed upon for us, or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements of Monster Digital, Inc., as of December 31, 2017 and 2016, and for the years then ended, have been incorporated by reference herein and in the registration statement, which includes an explanatory paragraph relating to the Company's ability to continue as a going concern, in reliance upon the report of CohnReznick LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

Mayer Hoffman McCann P.C., our independent registered public accounting firm, has audited our balance sheets as of December 31, 2017 and 2016, and the related statements of operations and comprehensive loss, stockholders' deficit and cash flows for each of the two years in the period ended December 31, 2017, as set forth in their report, which report expresses an unqualified opinion and includes an explanatory paragraph relating to our ability to continue as a going concern. We have incorporated by reference the financial statements in this registration statement in reliance on the report of Mayer Hoffman McCann P.C. given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and other reports, proxy statements and 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. 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 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 at our website at <http://www.innovatebiopharma.com>. Such information is made available on our website as soon as reasonably practicable after we electronically file it with or furnish it to the SEC. Information contained on our website is not part of this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to “incorporate by reference” into this prospectus the information we file with the SEC, which means we may disclose important information to you by referring you to other documents we file separately with the SEC. The information we incorporate by reference is considered a part of this prospectus. We hereby incorporate by reference the following documents:

- Innovate’s Annual Report on Form 10-K for the fiscal year ended December 31, 2017 filed on March 14, 2018, as amended on June 29, 2018;
- Innovate’s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, filed on May 15, 2018; and
- Innovate’s Current Reports on Form 8-K filed on January 5, January 11, February 2 (as amended on March 29, 2018, and April 18, 2018), February 22, February 23, March 14, April 20, May 15, June 18, and June 29, 2018.

Any information in the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus modifies or replaces such information. We also incorporate by reference any future filings (other than information furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until we file a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold. All filings made with the SEC pursuant to the Exchange Act after the date of this Registration Statement and prior to effectiveness of the Registration Statement are incorporated by reference. Information in such future filings shall be deemed to update and supplement the information provided in this prospectus, and any statements in such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that the statements in the later filed document modify or replace such earlier statements.

You may obtain from us copies of the documents incorporated by reference in this prospectus, at no cost, by requesting them in writing or by telephone at:

Innovate Biopharmaceuticals, Inc.
8480 Honeycutt Road, Suite 120
Raleigh, NC 27615
(919) 275-1933



4,318,272 shares of Common Stock

PROSPECTUS SUPPLEMENT

H.C. Wainwright & Co.

April 29, 2019
