

As filed with the Securities and Exchange Commission on July [REDACTED], 2019

Registration No. 333-232369

UNITED STATES
 SECURITIES AND EXCHANGE COMMISSION
 Washington, D.C. 20549

AMENDMENT NO. 1
TO
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

Castle Biosciences, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
 (State or Other Jurisdiction of
 Incorporation or Organization)

8071
 (Primary Standard Industrial
 Classification Code Number)
 820 S. Friendswood Drive, Suite 201
 Friendswood, Texas 77546
 (866) 788-9007

77-0701774
 (I.R.S. Employer
 Identification Number)

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

Derek Maetzold
 President and Chief Executive Officer
 Castle Biosciences, Inc.
 820 S. Friendswood Drive, Suite 201
 Friendswood, Texas 77546
 (866) 788-9007

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent for Service)

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Approximate date of commencement of proposed sale to the public:

As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
 Non-accelerated filer Smaller reporting company
 Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price Per Share ⁽²⁾	Proposed Maximum Aggregate Offering Price ⁽¹⁾⁽²⁾	Amount of Registration Fee ⁽³⁾
Common Stock, \$0.001 par value per share	[REDACTED]	\$ [REDACTED]	\$ [REDACTED]	\$ [REDACTED]

(1) Includes an additional [REDACTED] shares that the underwriters have the option to purchase.
 (2) Estimated solely for the purpose of calculating the amount of the registration fee in accordance with Rule 457(a) under the Securities Act of 1933, as amended.
 (3) The registrant previously paid a registration fee of \$6,969 in connection with the initial filing of this registration statement on June 26, 2019.

The Registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The Offering

Common stock offered by us	██████ shares
Common stock to be outstanding after this offering	██████ (or ██████ shares if the underwriters exercise their option to purchase additional shares in full).
Option to purchase additional shares	The underwriters have a 30-day option to purchase up to a total of ██████ additional shares of common stock.
Use of proceeds	We currently intend to use the net proceeds from this offering as follows: <ul style="list-style-type: none">• approximately \$17 million for selling and marketing activities, including expansion of our sales force to support the ongoing commercialization of our current products and future products;• approximately \$17 million for research and development, related to the continued support of our current products as well as the development of our product pipeline; and• the remainder for working capital and other general corporate purposes, including the additional costs associated with being a public company. See “Use of Proceeds” for additional information.
Risk factors	You should carefully read the “Risk Factors” section of this prospectus for a discussion of certain of the factors to consider before deciding to purchase any shares of our common stock.
Proposed Nasdaq trading symbol	“CSTL”

The number of shares of our common stock to be outstanding after this offering is based on 10,373,091 shares of common stock outstanding as of June 30, 2019, after giving effect to the conversion of our outstanding shares of convertible preferred stock into 8,170,462 shares of common stock, and excludes:

- 1,848,102 shares of common stock issuable upon the exercise of outstanding stock options as of June 30, 2019, at a weighted-average exercise price of \$2.45 per share;
- ██████ shares of common stock reserved for future issuance under the 2019 equity incentive plan, or the 2019 Plan, which will become effective upon the execution and delivery of the underwriting agreement for this offering (which shares include ██████ new shares plus the number of shares (not to exceed 1,976,756 shares) (i) that remain available for the issuance of awards under the 2018 equity incentive plan, or the 2018 Plan, at the time the 2019 Plan becomes effective, and (ii) any shares underlying outstanding stock awards granted under the 2018 Plan and the 2008 stock plan, or the 2008 Plan, that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled “Executive and Director Compensation – Equity Incentive Plans”), as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the 2019 Plan;
- ██████ shares of common stock reserved for future issuance under the 2019 employee stock purchase plan, or the ESPP, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering;

- 102,487 shares of our common stock issuable upon the exercise of certain warrants outstanding as of June 30, 2019, at a weighted-average exercise price of \$6.88 per share; and
- 209,243 shares of our common stock issuable upon the exercise of a warrant issued on July [REDACTED], 2019, with an exercise price of approximately \$0.001 per share.

Unless otherwise indicated, all information contained in this prospectus assumes or gives effect to:

- the conversion of all our outstanding shares of convertible preferred stock as of June 30, 2019, into an aggregate of 8,170,462 shares of common stock in connection with the completion of this offering;
- the issuance by us of convertible promissory notes in January 2019 and February 2019, or the Q1 2019 Notes, and the conversion of approximately \$11.8 million of aggregate principal amount, plus accrued interest thereon, of the Q1 2019 Notes, which will automatically convert upon the completion of this offering into an aggregate of [REDACTED] shares of our common stock, based on an assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus), and assuming the occurrence of the conversion on June 30, 2019;
- the issuance by us of the July 2019 Note and the conversion of \$10.0 million of aggregate principal amount of the July 2019 Note, which will automatically convert upon the completion of this offering into an aggregate of [REDACTED] shares of our common stock at a conversion price equal to the lower of (a) a minimum valuation calculated pursuant to the terms of the July 2019 Note as of June 30, 2019 and (b) an assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus), and assuming the occurrence of the conversion on June 30, 2019;
- the net exercise of certain outstanding warrants to purchase shares of our Series F redeemable convertible preferred stock for an aggregate of [REDACTED] shares of common stock, based on an assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) in connection with the completion of this offering;
- the exercise of certain outstanding warrants to purchase shares of our Series E-1 redeemable convertible preferred stock for an aggregate of 10,663 shares of common stock in connection with the completion of this offering;
- the adjustment of outstanding warrants to purchase shares of our convertible preferred stock into warrants to purchase 102,487 shares of our common stock in connection with the completion of this offering;
- no exercise by the underwriters of their option to purchase up to a total of [REDACTED] additional shares of our common stock to cover overallotments;
- no exercise of the outstanding options described above;
- the filing of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws immediately prior to the completion of this offering; and
- a one-for-1,219 reverse stock split of our common stock to be effected prior to the completion of this offering.

A \$1.00 increase in the assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) would decrease the number of shares of our common stock issued on conversion of the Q1 2019 Notes (and therefore the number of shares to be outstanding after this offering) by [REDACTED] shares. A \$1.00 decrease in the assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase the number of shares of our common stock issued on conversion of the Q1 2019 Notes and the July 2019 Note (and therefore the number of shares to be outstanding after this offering) by [REDACTED] shares, and assuming the occurrence of the conversion on June 30, 2019.

Certain affiliates of our directors and other existing stockholders have indicated an interest in purchasing an aggregate of approximately \$ [REDACTED] million of shares of our common stock in this offering at the initial public offering price per share and on the same terms as other purchasers in this offering. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, fewer or no shares in this offering. The underwriters will receive the same underwriting discount on any shares purchased by these stockholders as they will on any other shares sold to the public in this offering.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of March 31, 2019 as follows:

- on an actual basis;
- on a pro forma basis to reflect (1) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the completion of this offering, (2) the conversion of all outstanding shares of our convertible preferred stock as of March 31, 2019 into 8,170,462 shares of our common stock and the resulting reclassification of the carrying value of the convertible preferred stock to permanent equity in connection with the completion of this offering, (3) the net exercise of certain outstanding warrants to purchase shares of our Series F redeemable convertible preferred stock for an aggregate of shares of common stock, based on an assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover page of this prospectus) in connection with the completion of this offering, (4) the adjustment of outstanding warrants to purchase shares of our convertible preferred stock into warrants to purchase 113,150 shares of our common stock and the resulting reclassification of our preferred stock warrant liability to additional paid-in-capital, a component of stockholders' equity (deficit), in connection with the completion of this offering and (5) the conversion of approximately \$11.8 million of aggregate principal amount, plus accrued interest thereon, of the Q1 2019 Notes which will automatically convert upon the completion of this offering into an aggregate of shares of our common stock, based on an assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover page of this prospectus), and assuming the occurrence of the conversion on March 31, 2019; and
- on a pro forma as adjusted basis to give further effect to (1) our issuance and sale of shares of common stock in this offering at an assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover page of this prospectus), after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, (2) the issuance of \$10.0 million principal amount of the July 2019 Note, (3) the conversion of \$10.0 million principal amount, plus accrued interest thereon, of the July 2019 Note, which will automatically convert upon completion of this offering into shares of our common stock, based on the lower of (a) a minimum valuation calculated pursuant to the terms of the July 2019 Notes as of March 31, 2019 and (b) an assumed initial public offering price of \$ per share (the midpoint of the price range set forth on the cover page of this prospectus) and assuming the occurrence of the conversion on March 31, 2019 and (4) the exercise of certain warrants to purchase shares of our Series E-1 redeemable convertible preferred stock for an aggregate of 10,663 shares of common stock in connection with the completion of this offering.

The pro forma and pro forma as adjusted information below is illustrative only, and our cash and cash equivalents and capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this information in conjunction with our financial statements and the related notes included in this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section and other financial information contained in this prospectus.

	As of March 31, 2019		
	Actual	Pro Forma	Pro Forma as Adjusted ⁽¹⁾
	(unaudited, in thousands, except share and per share data)		
Cash and cash equivalents	\$16,231	\$16,231	\$ <u> </u>
Convertible promissory notes ⁽²⁾	\$ 3,568	\$ <u> </u>	\$ <u> </u>
Long-term debt	23,632	<u>23,632</u>	<u>23,632</u>
Preferred stock warrant liability	1,181	<u> </u>	<u> </u>
Convertible preferred stock Series C, \$0.001 par value; 503,056 shares authorized, 503,056 shares issued and outstanding, actual; <u>no</u> shares authorized and no shares issued and outstanding, pro forma and pro forma adjusted	1,501	<u> </u>	<u> </u>

	As of March 31, 2019		
	Actual	Pro Forma	Pro Forma as Adjusted ⁽¹⁾
	(unaudited, in thousands, except share and per share data)		
Redeemable convertible preferred stock Series A, B, D, E-1, E-2, E-2A, E-3 and F, \$0.001 par value; 11,846,877 shares authorized, 9,456,775 shares issued and outstanding, actual; <u>no</u> shares authorized and no shares issued and outstanding, pro forma and pro forma as adjusted.	45,051	—	—
Stockholders' equity (deficit):			
Common stock, \$0.001 par value; 17,308,384 shares authorized, <u>1,916,701</u> shares issued and outstanding, actual; <u>200,000,000</u> shares authorized, <u> </u> shares issued and outstanding, pro forma; <u>200,000,000</u> shares authorized, <u> </u> shares issued and outstanding, pro forma as adjusted	2	■	■
<u>Preferred stock, par value \$0.001 per share; no shares authorized, issued or outstanding actual and pro forma; 10,000,000 shares authorized, no shares issued or outstanding; pro forma as adjusted</u>	—	—	—
Additional paid-in capital.	9,412	■	■
Accumulated deficit	(58,846)	(58,846)	(58,846)
Total stockholders' equity (deficit)	(49,432)	■	■
Total capitalization.	<u>\$ 25,501</u>	<u>\$ ■</u>	<u>\$ ■</u>

- (1) Each \$1.00 increase (decrease) in the assumed initial public offering price of \$■ per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, additional paid-in capital, total capitalization and total stockholders' equity by approximately \$■ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, each increase (decrease) of one million shares in the number of shares offered by us at the assumed initial public offering price per share of \$■ per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) each of cash and cash equivalents, additional paid-in capital, total capitalization and total stockholders' equity by approximately \$■ million, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.
- (2) Principal amount, less unamortized discounts and issuance costs, plus embedded derivative liability. See Note 7 to our unaudited interim condensed financial statements included elsewhere in this prospectus for additional information on the accounting treatment of the convertible promissory notes.

A \$1.00 increase in the assumed initial public offering price of \$■ per share (the midpoint of the price range set forth on the cover page of this prospectus) would decrease the number of shares of our common stock issued on conversion of the Q1 2019 Notes (and therefore the number of shares to be outstanding after this offering) by ■ shares. A \$1.00 decrease in the assumed initial public offering price of \$■ per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase the number of shares of our common stock issued on conversion of the Q1 2019 Notes and the July 2019 Note (and therefore the number of shares to be outstanding after this offering) by ■ shares, and assuming the occurrence of the conversion on March 31, 2019.

The number of shares of common stock shown as issued and outstanding after this offering is based on the number of shares of our common stock outstanding as of March 31, 2019, and excludes:

- 2,112,395 shares of common stock issuable upon the exercise of outstanding stock options as of March 31, 2019, at a weighted-average exercise price of \$2.29 per share;
- ■ shares of common stock reserved for future issuance under the 2019 Plan, which will become effective upon the execution and delivery of the underwriting agreement for this offering (which shares include ■ new shares plus the number of shares (not to exceed 1,976,756 shares) (i) that remain available for the issuance of awards under the 2018 Plan at the time the 2019 Plan becomes effective, and (ii) any shares underlying outstanding stock awards granted under the 2018 Plan and the 2008 Plan, that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled "Executive and Director Compensation – Equity Incentive Plans"), as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the 2019 Plan;

- [REDACTED] shares of common stock reserved for future issuance under the ESPP, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 102,487 shares of our common stock issuable upon the exercise of certain warrants outstanding as of March 31, 2019, at a weighted-average exercise price of \$6.88 per share.

DILUTION

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

As of March 31, 2019, we had a historical net tangible book value (deficit) of \$(50.0) million, or \$(26.08) per share of common stock. Our historical net tangible book value (deficit) per share represents the amount of our total tangible assets less total liabilities and preferred stock, which is not included in our stockholders deficit, divided by the total number of shares of common stock outstanding at March 31, 2019.

After giving effect to: (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 8,170,462 shares of our common stock and the resulting reclassification of the carrying value of the convertible preferred stock to permanent equity, in connection with the completion of this offering; (ii) the net exercise of certain outstanding warrants to purchase shares of our Series F redeemable convertible preferred stock for an aggregate of [REDACTED] shares of common stock, based on an assumed initial public offering price of \$[REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) in connection with the completion of this offering; (iii) the adjustment of outstanding warrants to purchase shares of our convertible preferred stock into warrants to purchase 113,150 shares of our common stock and the resulting reclassification of our preferred stock warrant liability to additional paid-in-capital, a component of stockholders' equity (deficit), in connection with the completion of this offering; (iv) the conversion of approximately \$11.8 million of aggregate principal amount, plus accrued interest thereon, of the Q1 2019 Notes which will automatically convert upon the completion of this offering into an aggregate of [REDACTED] shares of our common stock, based on an assumed initial public offering price of \$[REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus), and assuming the occurrence of the conversion on March 31, 2019; our pro forma net tangible book value as of March 31, 2019 is \$[REDACTED] million, or \$[REDACTED] per share of our common stock.

Net tangible book value dilution per share to new investors represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after completion of this offering. After giving further effect to (i) the sale of shares of common stock that we are offering at the initial public offering price of \$[REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, (ii) the issuance of \$10.0 million principal amount of the July 2019 Note, (iii) the conversion of \$10.0 million principal amount, plus accrued interest thereon, of the July 2019 Note, which will automatically convert upon completion of this offering into [REDACTED] shares of our common stock, based on the lower of (a) a minimum valuation calculated pursuant to the terms of the July 2019 Notes as of March 31, 2019 and (b) an assumed initial public offering price of \$[REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) and assuming the occurrence of the conversion on March 31, 2019 and (iv) the exercise of certain warrants to purchase shares of our Series E-1 redeemable convertible preferred stock for an aggregate of [REDACTED] shares of common stock in connection with the completion of this offering, our pro forma as adjusted net tangible book value as of March 31, 2019 is \$[REDACTED] million, or approximately \$[REDACTED] per share. This amount represents an immediate increase in pro forma net tangible book value of \$[REDACTED] per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of approximately \$[REDACTED] per share to new investors participating in this offering.

Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution:

Assumed initial public offering price per share		\$ [REDACTED]
Historical net tangible book value (deficit) per share as of March 31, 2019, before giving effect to this offering		<u>\$(26.08)</u>
Pro forma increase in historical net tangible book value (deficit) per share as of March 31, 2019 attributable to conversion of all outstanding shares of convertible preferred stock, net exercise of certain warrants and conversion of convertible promissory notes as described in the preceding paragraph		\$ [REDACTED]
Pro forma net tangible book value per share as of March 31, 2019, before giving effect to this offering <u>and the additional transactions as described the preceding paragraph</u>		\$ [REDACTED]
<u>Increase in pro forma net tangible book value per share attributable to the issuance and conversion of the July 2019 Note and the exercise of certain warrants as described in the preceding paragraph</u>		\$ [REDACTED]
Increase in pro forma net tangible book value per share attributable to investors participating in this offering		[REDACTED]
Pro forma as adjusted net tangible book value per share after this offering		[REDACTED]
Dilution per share to new investors participating in this offering		<u>\$ [REDACTED]</u>

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) the pro forma as adjusted net tangible book value per share after this offering by approximately \$ [REDACTED] and dilution in pro forma net tangible book value per share to new investors by approximately \$ [REDACTED], assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and the estimated offering expenses payable by us.

An increase of one million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase our pro forma as adjusted net tangible book value per share after this offering by approximately \$ [REDACTED] and decrease the dilution to investors participating in this offering by approximately \$ [REDACTED] per share, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and the estimated offering expenses payable by us. Similarly, a decrease of one million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by approximately \$ [REDACTED] and increase the dilution to investors participating in this offering by approximately \$ [REDACTED] per share, assuming that the assumed initial public offering price remains the same, and after deducting the estimated underwriting discounts and commissions and the estimated offering expenses payable by us.

If the underwriters exercise their option to purchase additional shares of our common stock in full in this offering, the pro forma as adjusted net tangible book value after the offering would be \$ [REDACTED] per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be \$ [REDACTED] per share and the dilution per share to new investors would be \$ [REDACTED] per share, in each case assuming an initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus).

To the extent that outstanding options with an exercise price per share that is less than the pro forma as adjusted net tangible book value per share are exercised, new investors will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The following table summarizes on a pro forma as adjusted basis as of March 31, 2019, the number of shares of common stock purchased or to be purchased from us, the total consideration paid or to be paid to us in cash and the average price per share paid by existing stockholders for shares issued prior to this offering and the price to

be paid by new investors in this offering. The calculation below is based on the assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus), before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table below shows, investors participating in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders ⁽¹⁾	11,815,224	[REDACTED]%	\$ 68,494,690	[REDACTED]%	\$ 5.80
Investors participating in this offering	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	[REDACTED]	100.0%	[REDACTED]	100.0%	[REDACTED]

(1) Certain affiliates of our directors and other existing stockholders have indicated an interest in purchasing an aggregate of approximately \$ [REDACTED] million of shares of our common stock in this offering at the initial public offering price per share and on the same terms as other purchasers in this offering. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, fewer or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, fewer or no shares in this offering.

Each \$1.00 increase in the assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase total consideration paid by new investors, total consideration paid by all stockholders and the average price per share paid by all stockholders by \$ [REDACTED] million, \$ [REDACTED] million and \$ [REDACTED], respectively, while each \$1.00 decrease in the assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) would decrease total consideration paid by new investors, total consideration paid by all stockholders and the average price per share paid by all stockholders by \$ [REDACTED] million, \$ [REDACTED] million and \$ [REDACTED], respectively, and assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and before deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by investors participating in this offering, total consideration paid by all stockholders and the average price per share paid by all stockholders by approximately \$ [REDACTED] million, \$ [REDACTED] million and \$ [REDACTED], respectively, assuming the assumed initial public offering price of \$ [REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) remains the same, and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The foregoing tables and calculations exclude:

- 2,112,395 shares of common stock issuable upon the exercise of outstanding stock options as of March 31, 2019, at a weighted-average exercise price of \$2.29 per share;
- [REDACTED] shares of common stock reserved for future issuance under the 2019 Plan, which will become effective upon the execution and delivery of the underwriting agreement for this offering (which shares include [REDACTED] new shares plus the number of shares (not to exceed [REDACTED] shares) (i) that remain available for the issuance of awards under the 2018 Plan at the time the 2019 Plan becomes effective, and (ii) any shares underlying outstanding stock awards granted under the 2018 Plan and the 2008 Plan that expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled “Executive and Director Compensation – Equity Incentive Plans”), as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the 2019 Plan;
- [REDACTED] shares of common stock reserved for future issuance under the ESPP, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 102,487 shares of our common stock issuable upon the exercise of certain warrants outstanding as of March 31, 2019, at a weighted-average exercise price of \$6.88 per share.

We may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

SELECTED FINANCIAL DATA

The following tables set forth our selected financial data for the periods indicated. The following selected statements of operations and comprehensive loss data for the years ended December 31, 2017 and 2018 and the balance sheet data as of December 31, 2017 and 2018 are derived from our audited financial statements appearing elsewhere in this prospectus. The following selected statements of operations and comprehensive loss data for the three months ended March 31, 2018 and 2019 and the balance sheet data as of March 31, 2019 are derived from our unaudited interim condensed financial statements appearing elsewhere in this prospectus. This selected financial data should be read together with our financial statements and related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” appearing elsewhere in this prospectus. This selected financial data in this section are not intended to replace our financial statements and related notes. Our historical results are not necessarily indicative of our future results and our operating results for the interim periods are not necessarily indicative of the results that may be expected for any other interim periods or any future year.

	Years Ended December 31,		Three Months Ended March 31,	
	2017	2018	2018	2019
	(unaudited)			
	(in thousands, except share and per share data)			
Statements of Operations and Comprehensive Loss				
Data:				
Net revenues	\$ 13,754	\$ 22,786	\$ 3,659	\$ 8,717
Cost of sales	4,922	5,297	1,253	1,598
Gross margin	8,832	17,489	2,406	7,119
Operating expenses:				
Research and development	4,473	4,854	1,263	1,394
Selling, general and administrative	15,259	16,470	4,228	6,047
Total operating expenses	19,732	21,324	5,491	7,441
Operating loss	(10,900)	(3,835)	(3,085)	(322)
Interest income	26	24	5	21
Interest expense	(1,649)	(2,275)	(529)	(1,024)
Other income (expense), net	163	(272)	(21)	(33)
Loss before income taxes	(12,360)	(6,358)	(3,630)	(1,358)
Income tax expense	10	9	—	—
Net loss and comprehensive loss	(12,370)	(6,367)	(3,630)	(1,358)
Convertible preferred stock cumulative dividends	2,897	3,577	810	928
Accretion of redeemable convertible preferred stock to redemption value	41	219	49	56
Net loss and comprehensive loss attributable to common stockholders	\$ (15,308)	\$ (10,163)	\$ (4,489)	\$ (2,342)
Loss per share attributable to common stockholders, basic and diluted ⁽¹⁾	\$ (8.08)	\$ (5.33)	\$ (2.37)	\$ (1.22)
Weighted-average shares outstanding, basic and diluted ⁽¹⁾	1,895,520	1,905,820	1,897,057	1,916,516
Pro forma loss per share, basic and diluted (unaudited) ⁽¹⁾⁽²⁾		\$ (0.62)		\$ (0.09)
Pro forma weighted-average shares outstanding, basic and diluted (unaudited) ⁽¹⁾⁽²⁾		9,784,214		10,686,097

- (1) See Note 3 to our financial statements appearing elsewhere in this prospectus for an explanation of the method used to calculate the basic and diluted loss per share and the number of shares used in the computation of the per share amounts.
- (2) The calculations for the unaudited pro forma loss per share, basic and diluted, assume the conversion of all our outstanding shares of convertible preferred stock into shares of our common stock and the net exercise of certain outstanding warrants to purchase shares of our convertible preferred stock for common stock as if the conversion or net exercise had occurred at the beginning of the period presented or the issuance date, if later, and exclude the effect of shares issuable upon the conversion of all outstanding principal and accrued interest related to the July 2019 Note, which was issued after the periods presented in the table above, upon completion of this offering. For the three months ended March 31, 2019, the calculations further assume the conversion into shares of common stock all outstanding principal and accrued interest related to the Q1 2019 Notes as if the conversion had occurred at the respective issuance dates of the Q1 2019 Notes. Because the Q1 2019 Notes were not issued until after December 31, 2018, the assumed conversion of such notes into shares of common stock had no impact on the calculations for the year ended December 31, 2018.

	<u>December 31,</u>		<u>March 31.</u>
	<u>2017</u>	<u>2018</u>	<u>2019</u>
	(in thousands)		
Balance Sheet Data:			
Cash and cash equivalents	\$ 1,212	\$ 4,479	\$ 16,231
Working capital ⁽¹⁾	\$ 1,464	\$ 11,389	\$ 18,035
Total assets	\$ 9,820	\$ 22,405	\$ 30,966
Convertible promissory notes ⁽²⁾	\$ —	\$ —	\$ 3,568
Long-term debt	\$ 17,603	\$ 24,500	\$ 23,632
Preferred stock warrant liability	\$ 525	\$ 1,194	\$ 1,181
Convertible preferred stock	\$ 1,501	\$ 1,501	\$ 1,501
Redeemable convertible preferred stock	\$ 34,538	\$ 44,995	\$ 45,051
Total stockholders' deficit	\$(50,311)	\$(56,565)	\$(49,432)

- (1) We define working capital as current assets minus current liabilities. See our financial statements and related notes included elsewhere in this prospectus for further details regarding our current assets and liabilities.
- (2) Principal amount, less unamortized discounts and issuance costs, plus embedded derivative liability. See Note 7 to our unaudited interim condensed financial statements included elsewhere in this prospectus for additional information on the accounting treatment of the Q1 2019 Notes.

USE OF PROCEEDS

We estimate that we will receive net proceeds of approximately \$[REDACTED] million (or approximately \$[REDACTED] million if the underwriters' option to purchase additional shares is exercised in full) from the sale of the shares of common stock offered by us in this offering, based on an assumed initial public offering price of \$[REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A \$1.00 increase (decrease) in the assumed initial public offering price of \$[REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) would increase (decrease) the net proceeds to us from this offering by approximately \$[REDACTED] million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. Similarly, a one million share increase (decrease) in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us by \$[REDACTED] million, assuming the assumed initial public offering price of \$[REDACTED] per share (the midpoint of the price range set forth on the cover page of this prospectus) remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional capital to support our operations, to create a public market for our common stock and to facilitate our future access to the public equity markets. We anticipate that we will use the net proceeds of this offering as follows:

- approximately \$17 million for selling and marketing activities, including expansion of our sales force to support the ongoing commercialization of our current products and future products;
- approximately \$17 million for research and development related to the continued support of our current products as well as the development of our product pipeline; and
- the remainder for working capital and other general corporate purposes, including the additional costs associated with being a public company.

We may also use a portion of the net proceeds from this offering to in-license, acquire, or invest in complementary businesses, technologies, products or assets. However, we have no current plans, commitments or obligations to do so.

We believe that the net proceeds from this offering together with our existing cash and cash equivalents and anticipated cash generated from sales of our products will be sufficient to fund our operating expenses through at least the next 24 months, although there can be no assurance in that regard.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering. Our management will have broad discretion in the application of the net proceeds, and investors will be relying on our judgment regarding the application of the net proceeds from this offering between the uses set forth above. The amounts and timing of our actual use of the net proceeds will vary depending on numerous factors, including the following: the timing and amount of our cash receipts from sales of our current and future products; the timing and amount of our expenses related to the sale of our current and future products, including the costs related to our sales and marketing efforts; the progress, cost and results of our development programs; our ability to obtain additional financing; changes in the level of FDA regulation applicable to our current and future products; and other factors described under "Risk Factors" in this prospectus, many of which are outside our control and are difficult to anticipate, as well as the amount of cash used in our operations. Depending on the outcome of these factors, our plans and priorities may change, and we may be required to apply the net proceeds of this offering differently than we currently anticipate, and it may be necessary to allocate more or less of the net proceeds to the categories described above. We do not expect that we will decrease our estimated allocations to selling and marketing or research and development to fund potential acquisitions or for general and administrative expenses if doing so would have an adverse effect on the financial resources we believe will be necessary for us to pursue our business goals.

Alternative uses for the net proceeds from this offering include:

- increased allocation to research and development in the event we decide to focus our efforts on new products or the acceleration of the development of products in our pipeline, or that we are required to conduct additional clinical trials or other research and development activities in response to changes in FDA regulations applicable to our current or future products;
- decreased allocation to research and development in the event we abandon or are unable to continue any of our current research and development activities, trials or studies, or complete current research and development activities and elect not to begin new research and development efforts;
- increased allocation to selling and marketing activities to drive increased adoption of our current or future products;
- decreased allocation to selling and marketing in the event we decide to forego, scale-back or delay our expansion of our sales force;
- increased allocation to general and administrative in the event we increase our billing and collections and customer service capabilities to address increased adoption of and reimbursement for our current or future products; and
- increased allocation to research and development or selling and marketing, as applicable, in the event we license complementary technologies or acquire complementary businesses or other assets, although we have no current commitments, understandings or agreements with respect to any material acquisition or license.

Pending their use, we may invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

Long-Term Debt

Our long-term debt consists of term debt and a revolving line of credit and are presented in the table below (in thousands):

	As of December 31,		As of March 31,
	2017	2018	2019
			(unaudited)
Term debt	\$16,013	\$21,350	\$21,350
Revolving line of credit	4,000	5,000	4,011
Total principal amount	20,013	26,350	25,361
Unamortized discount and issuance costs	(1,410)	(1,850)	(1,729)
Total long-term debt	18,603	24,500	23,632
Less: Current portion of long-term debt	1,000	—	—
Long-term debt, less current portion	<u>\$17,603</u>	<u>\$24,500</u>	<u>\$23,632</u>

The table above excludes the Q1 2019 Notes, which are classified as current liabilities in the balance sheet. See the “Convertible Promissory Notes” section below for details.

Term Debt

2017 Loan and Security Agreement

On March 31, 2017, we executed a loan and security agreement, or the 2017 LSA, with Oxford, as collateral agent, and SVB with Oxford and SVB as equal syndicated lenders, or the Lenders. The 2017 LSA provides a term loan of \$15.0 million, or the 2017 Term Loan, and a credit line of up to \$5.0 million (discussed in the “Revolving Line of Credit” section below) and granted to the Lenders a priority first lien security interest in substantially all of our assets. The 2017 Term Loan of \$15.0 million was made on the effective date of the agreement and was used to repay all outstanding obligations with respect to our previous lending arrangement. The maturity date of the 2017 Term Loan was to be April 1, 2021, or the 2017 Term Loan Maturity Date.

The 2017 Term Loan bore interest at a floating per annum rate equal to the greater of 7.25% and 6.48% above the U.S. LIBOR rate and required the payment of interest only each month for the one-year period beginning with the date of initial funding of the loan. The applicable annual interest rate of the 2017 LSA on the effective date, and as of December 31, 2017, was 7.46% and 8.04%, respectively. Repayment of principal was to be made in 36 monthly installments of principal and interest beginning in the month following the one-year interest-only period; provided, that if we achieved a stipulated revenue target for the trailing 12-month period ending January 31, 2018, 30 fixed monthly installments, beginning in the month following an 18-month interest-only period. Additionally, the 2017 LSA also included an obligation to make an additional final payment of 6.25% (6.75% in the case the stipulated revenue target was met) of the aggregate original principal amount of the 2017 Term Loan upon any prepayment or on the 2017 Term Loan Maturity Date. As we achieved the stipulated revenue target, repayment of principal was to be made in 30 fixed monthly installments beginning in the month following the 18-month interest-only period (i.e., November 1, 2018) and the additional final payment amount was to be 6.75% of the original principal amount, or \$1,012,500. The final payment amount was being amortized as additional interest expense using the effective interest method over the term of the debt.

As stipulated in the 2017 LSA and concurrent with the funding of the 2017 Term Loan, we issued Series F preferred stock warrants to the Lenders which had an aggregate initial fair value of \$382,597. In accordance with ASC 480-10, *Distinguishing Liabilities from Equity*, or ASC 480-10, the warrants are liability-classified as the underlying to the warrant is a puttable security. The initial recognition of the warrant liability created a discount to the debt, which is being amortized over the debt term using the effective interest method. With respect to Oxford, the 2017 LSA was accounted for as a new borrowing. With respect to SVB, the 2017 LSA was accounted for as a modification of our previous lending arrangement with SVB, and therefore no extinguishment gain or loss was recognized.

2018 Loan and Security Agreement

On November 30, 2018, we entered into the 2018 LSA with Oxford, as collateral agent, and Oxford and SVB as equal syndicated lenders. The 2018 LSA replaced the 2017 LSA and provided for a \$20.0 million term loan, or

the 2018 Term Loan, and a credit line of up to \$5.0 million (discussed in the “Revolving Line of Credit” section below), prior to amendment of the 2018 LSA on June 13, 2019, as discussed below. Our obligations under the 2018 LSA are secured by substantially all of our assets, excluding intellectual property and subject to certain other exceptions and limitations. We have the right to prepay the 2018 Term Loan in whole or in part at any time, subject to a prepayment fee of 2.50% if prepaid on or prior to November 30, 2019, 1.50% if prepaid after November 30, 2019 and on or prior to November 30, 2020, and 0.75% thereafter. Upon prepayment, we are also obligated to pay a non-refundable early termination fee of \$496,785. Amounts prepaid or repaid under the 2018 Term Loan may not be reborrowed. The 2018 LSA contained a financial covenant that requires us to achieve a monthly trailing six-month revenue target each month throughout the term of the agreement, which was recently amended and changed to a monthly trailing three-month revenue target, as discussed further below. As of December 31, 2018 and March 31, 2019, we were in compliance with this covenant. In addition, the 2018 LSA contains customary conditions of borrowing, events of default and covenants, including covenants that restrict our ability to dispose of assets, merge with or acquire other entities, incur indebtedness and make distributions to holders of our capital stock. Should an event of default occur, including the occurrence of a material adverse change, we could be liable for immediate repayment of all obligations under the 2018 LSA.

On June 13, 2019, we entered into an amendment to the 2018 LSA, or the Amendment, which, among other things, requires that we achieve certain revenue levels tested monthly on a trailing three-month basis. For each month through December 31, 2019, the trailing three-month revenue requirements are calculated as a percentage of our previously approved applicable monthly revenue targets, which, for the monthly periods from April to December 2019, are equal to increasing dollar amounts, in millions, in the mid-single digits to high single digits. For monthly periods ending after December 31, 2019, the trailing three-months revenue requirements will be determined by the Lenders upon receipt and review of our monthly financial projections for the year, subject to certain specified criteria regarding minimum requirements. Revenues, if any, that we recognize as a result of an ALJ appeal process from consolidated claims initiatives for DecisionDx-Melanoma do not count toward the minimum revenue requirements. We were in compliance with this covenant as the the most recently tested month prior to the date of this prospectus. Additionally, the Amendment eliminated the \$5.0 million revolving line and increased the 2018 Term Loan by \$5.0 million.

The 2018 Term Loan bears interest at a floating rate equal to the greater of 8.55% and the 30-day U.S. LIBOR rate as reported in The Wall Street Journal on the last business day of the month that precedes the month in which the interest will accrue, plus 6.48%. The applicable interest rate on the 2018 Term Loan was 8.98% as of December 31, 2018 and 8.97% as of March 31, 2019, respectively. Interest on the 2018 Term Loan is payable monthly in arrears. We are permitted to make interest-only payments on the 2018 Term Loan through May 31, 2020. The principal is required to be repaid in 30 equal monthly installments beginning on June 1, 2020. All unpaid principal and accrued and unpaid interest is due on November 1, 2022, or the 2018 Term Loan Maturity Date. We are also obligated to make an additional final payment of 6.75% of the aggregate original principal amount, or \$1,350,000 as of March 31, 2019, upon any prepayment or on the 2018 Term Loan Maturity Date. The final payment amount is being amortized as additional interest expense using the effective interest method of the term of the debt. The final payment amount increased to \$1,687,500 in connection with the \$5.0 million increase to the 2018 Term Loan under the Amendment.

The 2018 Term Loan was fully funded on November 30, 2018 and the 2018 Revolving Line (defined and discussed below) was fully drawn upon on November 30, 2018. Proceeds from the 2018 LSA were used to repay all outstanding obligations under the 2017 LSA and to provide working capital. As a condition of the loan, we issued Series F preferred stock warrants to the Lenders with an aggregate initial fair value of \$158,000. In accordance with ASC 480-10, the warrants are liability-classified as the underlying to the warrant is a puttable security. The initial recognition of the warrant liability created a discount to the debt, which is being amortized over the debt term using the effective interest method. The 2018 LSA was accounted for as a modification of the previous lending arrangement with SVB and Oxford, and therefore no extinguishment gain or loss was recognized.

Revolving Line of Credit

In connection with the issuance of the 2017 Term Loan, we repaid \$2.0 million that was drawn on the revolving line under our previous lending arrangement. In the 2017 LSA, the Lenders agreed to provide availability to us of up to \$5.0 million of credit, or the 2017 Revolving Line, based on the application of an advance rate against either specified accounts receivable, or accounts receivable in the aggregate, contingent on our satisfaction of

The concentration of our stock ownership will likely limit your ability to influence corporate matters, including the ability to influence the outcome of director elections and other matters requiring stockholder approval.

Based upon shares outstanding as of June 30, 2019, our executive officers, directors and the holders of more than 5% of our outstanding common stock, in the aggregate, beneficially owned approximately █% of our common stock, and upon the completion of this offering, that same group, in the aggregate, will beneficially own approximately █% of our common stock. As a result, these stockholders, acting together, will have significant influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Corporate actions might be taken even if other stockholders, including those who purchase shares in this offering, oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other stockholders may view as beneficial.

Moreover, certain affiliates of our directors and other existing stockholders have indicated an interest in purchasing shares of our common stock in this offering at the initial public offering price. Based upon the initial public offering price of \$█ per share, if our greater than 5% stockholders purchase all of the shares they have indicated an interest in purchasing in this offering, the number of shares of our common stock beneficially owned by our executive officers, directors and greater than 5% stockholders will, in the aggregate, increase to approximately █% of our outstanding common stock. However, because indications of interest are not binding agreements or commitments to purchase, the underwriters may determine to sell more, less or no shares in this offering to any of these stockholders, or any of these stockholders may determine to purchase more, less or no shares in this offering.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect at the completion of this offering could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our common stock.

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to and upon the completion of this offering, respectively, may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that the board of directors or any individual director may only be removed with cause and the affirmative vote of the holders of at least 66-2/3% of the voting power of all of our then outstanding common stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);

- provide that special meetings of our stockholders may be called only by the chairman of the board, our Chief Executive Officer or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors;
- provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on our behalf; (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (iii) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws; (iv) any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; (v) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants; provided these provisions of our amended and restated certificate of incorporation and amended and restated bylaws will apply to suits brought to enforce a duty or liability created by the Securities Act, but stockholders will not be deemed to have waived our compliance with the federal securities laws and the regulations thereunder; and provided these provisions of our amended and restated certificate of incorporation and amended and restated bylaws will not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction; and
- provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision.

Our amended and restated certificate of incorporation and amended and restated bylaws do not address the alternate courts that will be the appropriate forum if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66-2/3% of our then-outstanding common stock.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction.

For information regarding these and other provisions, see "Description of Capital Stock."

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware is the exclusive forum for certain disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation will provide that, to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants, the Court

of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on our behalf; (ii) any action or proceeding asserting a breach of fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (iii) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees arising out of or pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or amended and restated bylaws; (iv) any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of amended and restated incorporation or our amended and restated bylaws; (v) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any action asserting a claim against us or any of our directors, officers or other employees that is governed by the internal affairs doctrine; provided these provisions of our amended and restated certificate of incorporation and amended and restated bylaws will apply to suits brought to enforce a duty or liability created by the Securities Act, but stockholders will not be deemed to have waived our compliance with the federal securities laws and the regulations thereunder; and provided, that, this provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction. Our amended and restated certificate of incorporation and amended and restated bylaws provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision.

These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees and may discourage these types of lawsuits. Furthermore, the enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. If a court were to find the choice of forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions. In addition, our amended and restated certificate of incorporation and amended and restated bylaws do not address the alternate courts that will be the appropriate forum if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction.

Anti-Takeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation, Our Amended and Restated Bylaws and Delaware Law

Delaware Anti-Takeover Law

We are subject to Section 203 of the Delaware General Corporation Law, or Section 203. Section 203 generally prohibits a public Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the time that such stockholder became an interested stockholder, unless:

- prior to such time the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to and upon the completion of this offering, respectively, may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution of the board of directors;

- provide that the board of directors or any individual director may only be removed with cause and the affirmative vote of the holders of at least 66⅔% of the voting power of all of our then outstanding common stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the chairman of the board, our Chief Executive Officer or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors;
- provide that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on our behalf, (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (iii) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws; (iv) any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; (v) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants; provided these provisions of our amended and restated certificate of incorporation and amended and restated bylaws will not apply to suits brought to enforce a duty or liability created by the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction; and
- provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision.

Our amended and restated certificate of incorporation and amended and restated bylaws do not address the alternate courts that will be the appropriate forum if the Court of Chancery of the State of Delaware lacks subject matter jurisdiction.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66⅔% of our then-outstanding common stock.

Exchange Listing

Our common stock has been approved for listing on The Nasdaq Global Select Market under the symbol "CSTL."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Broadridge Corporate Issuer Solutions, Inc.