

CareDx, Inc.
Form 424B5
October 12, 2018
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**Filed Pursuant to Rule 424(b)(5)
Registration No. 333-227168**

PROSPECTUS

\$50,000,000

Common Stock

We have entered into a Sales Agreement with Jefferies LLC, or Jefferies, dated August 31, 2018, relating to shares of our common stock offered by this prospectus. In accordance with the terms of the sales agreement, under this prospectus we may offer and sell shares of our common stock having an aggregate offering price of up to \$50.0 million from time to time through Jefferies, acting as our agent.

Sales of shares of our common stock, if any, under this prospectus will be made by any method permitted that is deemed an at the market offering as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act. Jefferies is not required to sell any specific amount, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Jefferies will be entitled to compensation at a commission rate of up to 3.0% of the gross sales price of the shares sold under the sales agreement. See Plan of Distribution beginning on page S-13 for additional information regarding the compensation to be paid to Jefferies. In connection with the sale of the common stock on our behalf, Jefferies will be deemed to be an underwriter within the meaning of the Securities Act and the compensation of Jefferies will be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to Jefferies with respect to certain liabilities, including civil liabilities under the Securities Act.

We are an emerging growth company as that term is used in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and, as such, we have elected to comply with certain reduced public company reporting requirements for this prospectus and future filings with the Securities and Exchange Commission.

Our common stock is currently listed on the Nasdaq Global Market under the symbol CDNA. On October 10, 2018, the last reported sale price for our common stock was \$22.50 per share.

*Investing in our common stock involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading **Risk Factors** on page S-6 of this prospectus, and under similar headings in the documents that are incorporated by reference into 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.

Jefferies

The date of this prospectus is October 11, 2018.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. This prospectus relates only to an offering of up to \$50.0 million of shares of our common stock through Jefferies. These sales, if any, will be made pursuant to the terms of the sales agreement entered into between us and Jefferies on August 31, 2018, a copy of which is filed as an exhibit to the registration statement of which this prospectus is a part.

Before you invest, you should carefully read this prospectus, all information incorporated by reference herein and the additional information described under **Where You Can Find More Information** and **Information Incorporated by Reference**. These documents contain information you should consider when making your investment decision. To the extent that any statement that we make in this prospectus is inconsistent with statements made in any documents incorporated by reference, the statements made in this prospectus will be deemed to modify or supersede those made in such documents incorporated by reference.

You should rely only on the information contained or incorporated by reference in this prospectus, the documents incorporated by reference herein and any free writing prospectus we provide you. We have not, and Jefferies has not, authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not, and Jefferies is not, making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus, the documents incorporated by reference herein and any free writing prospectus we provide you is accurate only as of the date on those respective documents. Our business, financial condition, results of operations and prospects may have changed since those dates. You should read this prospectus, including the documents incorporated by reference herein, when making your investment decision. You should also read and consider the information in the documents we have referred you to in the sections of this prospectus entitled **Where You Can Find More Information** and **Incorporation of Documents by Reference**. The distribution of this prospectus and the offering of the common stock in certain jurisdictions may be restricted by law. Persons outside the United States, or the U.S., who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common stock and the distribution of this prospectus outside the U.S. This prospectus does 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 by any person in any jurisdiction in which it is unlawful for such person to make such an offer or solicitation.

Unless otherwise indicated, information contained in this prospectus or the documents incorporated by reference herein concerning our industry and the markets in which we operate, including our general expectations and market position, market opportunity and market share, is based on information from our own management estimates and research, as well as from industry and general publications and research, surveys and studies conducted by third parties. Management estimates are derived from publicly available information, our knowledge of our industry and assumptions based on such information and knowledge, which we believe to be reasonable. In addition, assumptions and estimates of our and our industry's future performance are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in **Risk Factors** in this prospectus, in our Annual Report on Form 10-K for the fiscal year ended December 31, 2017, as filed with the SEC on March 22, 2018, in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, as filed with the SEC on May 10, 2018 and in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, as filed with the SEC on August 9, 2018, which are incorporated by reference into this prospectus. These and other important factors could cause our future performance to differ materially from our assumptions and estimates. See **Disclosure Regarding Forward-Looking Statements**.

General information about us can be found on our website at www.caredx.com. The information on our website is for informational purposes only and should not be relied on for investment purposes. The information on our website is not incorporated by reference into either this prospectus and should not be considered part of this or any other report filed with the SEC.

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PROSPECTUS SUMMARY

*This summary highlights certain information about us, this offering and selected information contained elsewhere in this prospectus or incorporated by reference into this prospectus. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. For a more complete understanding of our company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus, including the information referred to under the heading *Risk Factors* in this prospectus on page S-6 and in the documents incorporated by reference into this prospectus. You should also carefully read the information incorporated by reference into this prospectus, including our financial statements, and the exhibits to the registration statement of which this prospectus is a part. Unless the context otherwise requires, the terms *CareDx*, *the Company*, *we*, *us* and *our* in this prospectus refer to *CareDx, Inc.* and its subsidiaries.*

The Company

We are a global transplant diagnostics company with product and service offerings along the pre- and post-transplant continuum. We focus on discovery, development and commercialization of clinically differentiated, high-value diagnostic surveillance solutions for transplant patients.

Testing Services

AlloMap

Our first commercialized testing solution, the AlloMap heart transplant molecular test, or AlloMap, is a gene expression test that helps clinicians monitor and identify heart transplant recipients with stable graft function who have a low probability of moderate-to-severe acute cellular rejection. Since 2005, we have sought to expand the adoption and utilization of our AlloMap solution through ongoing studies to substantiate the clinical utility and actionability of AlloMap, secure positive reimbursement decisions for AlloMap from large private and public payers, develop and enhance our relationships with key members of the transplant community, including opinion leaders at major transplant centers, and explore opportunities and technologies for the development of additional solutions for post-transplant surveillance. We believe the use of AlloMap, in conjunction with other clinical indicators, can help healthcare providers and their patients better manage long-term care following a heart transplant. In particular, we believe AlloMap can improve patient care by helping healthcare providers avoid the use of unnecessary, invasive surveillance biopsies and determine the appropriate dosage levels of immunosuppressants. In 2008, AlloMap received 510(k) clearance from the U.S. Food and Drug Administration, or FDA, for marketing and sale as a test to aid in the identification of recipients with a low probability of moderate or severe acute cellular rejection.

AlloMap has received positive coverage decisions for reimbursement from Medicare. The 2018 reimbursement rate for AlloMap is \$3,240, which represents a 14% increase over the 2017 reimbursement rate. AlloMap has also received positive coverage decisions for reimbursement from many of the largest U.S. private payers, including Aetna, Anthem, Cigna, Health Care Services Corporation (HCSC), Humana, Kaiser Foundation Health Plan, Inc., and TRICARE.

We have also successfully completed a number of landmark clinical trials in the transplant field demonstrating the clinical utility of AlloMap for surveillance of heart transplant recipients. We initially established the analytical and clinical validity of AlloMap on the basis of our Cardiac Allograft Rejection Gene Expression Observational (Deng, M. et al., *Am J Transplantation* 2006), or CARGO, study, which was published in the *American Journal of Transplantation*. A subsequent clinical utility trial, Invasive Monitoring Attenuation through Gene Expression (Pham

MX et al., N. Eng. J. Med., 2010), or IMAGE, published in The New England Journal of Medicine, demonstrated that clinical outcomes in recipients managed with AlloMap surveillance were equivalent (non-inferior) to outcomes in recipients managed with biopsies. The results of our clinical trials have also been presented at major medical society congresses.

During the first six months of 2018, there were 7,979 AlloMap patient test results provided to 128 of the approximately 135 heart transplant management centers in the United States.

AlloSure

AlloSure, our recently launched commercial transplant surveillance solution, applies proprietary next generation sequencing technology to measure donor-derived cell free DNA, or dd-cfDNA in the blood stream emanating from the donor kidney or heart. We believe AlloSure may help clinicians determine rejection-specific activity manifested as cell damage in the transplanted heart, kidney and other solid organs, irrespective of the type of organ transplanted. We also believe the use of AlloSure, in conjunction with other clinical indicators, can help healthcare providers and their patients better manage long-term care following a kidney transplant. In

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particular, we believe AlloSure can improve patient care by helping healthcare providers to reduce the use of invasive biopsies and determine the appropriate dosage levels of immunosuppressants. Effective October 9, 2017, AlloSure became available for commercial testing with Medicare coverage and reimbursement. The Medicare reimbursement rate for AlloSure is \$2,841. AlloSure has also received payment from private payers on a case-by-case basis, but no positive coverage decisions have been made.

Prior to the commercialization of AlloSure, we generated a strong body of clinical evidence. In late 2015, we announced the completion of analytical validation of AlloSure. A report describing the analytical validation of AlloSure including clinical validation detailing the quality, reality, and consistency of analytical results information for heart transplant appeared in the November 2016 issue of *The Journal of Molecular Diagnostics*.

The Circulating Donor-Derived Cell-Free DNA in Blood for Diagnosing Acute Rejection in Kidney Transplant Recipients, or DART, trial, sponsored by us, was conducted between April 2015 and January 2018. DART is a 14 center observational study of kidney transplant recipients where blood specimens are drawn periodically after transplant during follow up visits and also after treatment for acute rejection. By the time of completion of the first analysis, 384 patients were followed in DART for up to 24 months. The results demonstrated that increased levels of dd-cfDNA, determined by the AlloSure assay, discriminated active rejection of a kidney transplant more effectively than serum creatinine values. In collaboration with clinical investigators, we published these findings in the scientific peer-reviewed *Journal of the American Society of Nephrology* and the *Journal Applied Laboratory Medicine* in March 2017. A total of 2,109 patient visits had been accrued in DART by January 2018; we plan to analyze and report on additional findings from this dataset in 2018 and into the future.

In late 2017, we established the Kidney Allograft Outcomes AlloSure Registry, or K-OAR, study to develop further data on the clinical utility of AlloSure for surveillance of kidney transplant recipients. We will invite 35 centers to join K-OAR, and we anticipate staggered activation of these study centers throughout 2018. As of June 30, 2018, 27 centers have been initiated as K-OAR study sites.

During the first six months of 2018, there were 3,351 AlloSure patient test results provided. Since launch, AlloSure has been ordered by 76 kidney transplant centers in the United States.

Products

We develop, manufacture, market and sell products that increase the chance of successful transplants by facilitating a better match between a donor and a recipient of stem cells and organs. Olerup SSP[®] is used to type Human Leukocyte Antigen, or HLA alleles, based on the sequence specific primer, or SSP technology. Olerup SBT[™] is a complete product range for sequence-based typing of HLA alleles. Olerup QTYPE[®] enables speed and precision in HLA typing at a low to intermediate resolution for samples that require a fast turn-around-time and uses real-time polymerase chain reaction, or PCR methodology. QTYPE received CE mark certification on April 10, 2018.

On May 4, 2018, we entered into a License and Commercialization Agreement with Illumina, Inc., or Illumina, which provides us with worldwide distribution, development and commercialization rights to Illumina's next generation sequencing product line for use in transplantation diagnostic testing. As a result, on June 1, 2018, we became the exclusive worldwide distributor of Illumina's TruSight HLA product line. In addition, we were granted the exclusive right to develop and commercialize other next generation sequencing product lines for use in the field of bone marrow and solid organ transplantation diagnostic testing.

Corporate Information

We were originally incorporated in Delaware in December 1998 under the name Hippocratic Engineering, Inc. In April 1999, we changed our name to BioCardia, Inc., and in June 2002, we changed our name to Expression Diagnostics, Inc. In July 2007, we changed our name to XDx, Inc. and in March 2014, we most recently changed our name to CareDx, Inc. Our principal executive offices are located at 3260 Bayshore Boulevard, Brisbane, California 94005 and our telephone number is (415) 287-2300.

For a complete description of our business, financial condition, results of operations and other important information, we refer you to our filings with the SEC that are incorporated by reference in this prospectus, including our Annual Report on Form 10-K for the year ended December 31, 2017, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018. For instructions on how to find copies of these documents, see the section of this prospectus entitled **Where You Can Find More Information**.

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Emerging Growth Company Status

We qualify as an emerging growth company, as that term is defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. For as long as we qualify as an emerging growth company, we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that do not qualify as emerging growth companies, including, without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002, as amended, reduced disclosure obligations relating to executive compensation and exemptions from the requirements of holding advisory say-on-pay, say-when-on-pay and golden parachute executive compensation votes.

Under the JOBS Act, we will remain an emerging growth company until the earliest of:

the last day of the fiscal year during which we have total annual gross revenues of \$1.07 billion (subject to adjustment for inflation) or more;

the last day of the fiscal year following the fifth anniversary of the completion of our initial public offering, or January 1, 2020;

the date on which we have, during the previous three-year period, issued more than \$1.0 billion in non-convertible debt; and

the date on which we are deemed to be a large accelerated filer under the Securities Exchange Act of 1934, or the Exchange Act (i.e., the first day of the fiscal year after we have (1) more than \$700.0 million in outstanding common equity held by our non-affiliates, measured each year on the last day of our second fiscal quarter, and (2) been public for at least 12 months).

We have elected to take advantage of certain of the reduced disclosure obligations regarding executive compensation in this prospectus and may elect to take advantage of other reduced reporting requirements in future filings with the SEC. As a result, the information that we provide to our stockholders may be different than the information you receive from other public reporting companies.

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The Offering

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to \$50.0 million.
Manner of offering	At the market offering that may be made from time to time on the Nasdaq Global Market or other existing trading market for our common stock through our agent, Jefferies LLC. See Plan of Distribution on page S-13.
Use of Proceeds	We currently intend to use the net proceeds from this offering for working capital and general corporate purposes, which may include capital expenditures, research and development expenditures, clinical trial expenditures, acquisitions of new technologies and investments, business combinations and the repayment, refinancing, redemption or repurchase of indebtedness or capital stock. We reserve the right, at the sole discretion of our management, to reallocate the proceeds of this offering in response to developments in our business and other factors. See Use of Proceeds on page S-10.
Risk Factors	Investing in our common stock involves a high degree of risk. Please read the information contained in and incorporated by reference under the heading Risk Factors on page S-6 of this prospectus and under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus.
Nasdaq Global Market Listing	Our common stock is listed on the Nasdaq Global Market under the symbol CDNA.

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RISK FACTORS

*Investing in our common stock involves risk. Before deciding whether to invest in our common stock, you should consider carefully the risks and uncertainties described below. You should also consider the risks, uncertainties and assumptions discussed under the heading *Risk Factors* included in our most recent annual report on Form 10-K, as revised or supplemented by our most recent quarterly report on Form 10-Q, each of which are on file with the SEC and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below entitled *Disclosure Regarding Forward-Looking Statements*.*

Risks Related to This Offering

We will have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We currently intend to use the net proceeds of this offering for working capital and general corporate purposes, which may include capital expenditures, research and development expenditures, clinical trial expenditures, acquisitions of new technologies and investments, business combinations and the repayment, refinancing, redemption or repurchase of indebtedness or capital stock, as further described in the section of this prospectus entitled *Use of Proceeds*. We will have broad discretion in the application of the net proceeds in the category of other working capital and general corporate purposes and investors will be relying on the judgment of our management regarding the application of the proceeds of this offering.

The precise amount and timing of the application of these proceeds will depend upon a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering and commercialization efforts, technological advances and the competitive environment for our products. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Depending on the outcome of our efforts and other unforeseen events, our plans and priorities may change and we may apply the net proceeds of this offering in different manners than we currently anticipate.

The failure by our management to apply these funds effectively could harm our business, financial condition and results of operations. Pending their use, we may invest the net proceeds from this offering in short-term, interest-bearing instruments. These investments may not yield a favorable return to our stockholders.

You may experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of 2,192,982 shares of our common stock are sold during the term of the sales agreement with Jefferies at a price of \$22.80 per share, the last reported sale price of our common stock on the Nasdaq Global Market on August 29, 2018, for aggregate gross proceeds of approximately \$50.0 million, after deducting commissions and estimated aggregate offering expenses payable by us you will experience immediate dilution of \$22.01 per share, representing the difference between the assumed offering price per share and our as adjusted net tangible book value per share as of June 30, 2018 after giving effect to this offering. The exercise of outstanding stock options and warrants may result in further dilution of your investment. See the section

entitled "Dilution" below for a more detailed illustration of the dilution you would incur if you participate in this offering.

The actual number of shares we will issue under the sales agreement with Jefferies, at any one time or in total, is uncertain.

Subject to certain limitations in the sales agreement with Jefferies and compliance with applicable law, we have the discretion to deliver placement notices to Jefferies at any time throughout the term of the sales agreement. The number of shares that are sold by Jefferies after delivering a placement notice will fluctuate based on the market price of the common stock during the sales period and limits we set with Jefferies.

You may experience future dilution as a result of future equity offerings.

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

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We do not expect to pay dividends in the foreseeable future. As a result, you must rely on stock appreciation for any return on your investment.

We do not anticipate paying cash dividends on our common stock in the foreseeable future. Any payment of cash dividends will also depend on our financial condition, results of operations, capital requirements and other factors and will be at the discretion of our board of directors. Accordingly, you will have to rely on capital appreciation, if any, to earn a return on your investment in our common stock. Furthermore, our credit agreement with Perceptive Credit Holdings II, LP prohibits us from paying dividends without the prior consent of Perceptive Credit Holdings II, LP, and we may in the future become subject to additional contractual restrictions on, or prohibitions against, the payment of dividends.

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DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference in this prospectus contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as may, will, should, expects, plans, anticipates, could, intends, target, projects, continues, estimates, predicts, potential or continue or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions. Forward-looking statements contained in this prospectus and the documents incorporated by reference in this prospectus include, but are not limited to, statements about:

our ability to generate revenue from sales of AlloMap, AlloSure and future testing services, if any, and our ability to increase the commercial success of these testing services;

our ability to generate revenue from sales of Olerup SSP, Olerup SBT, Olerup QTYPE, TruSight HLA, and future products, if any, and our ability to increase the commercial success of these products;

our ability to generate revenue from the license and commercialization agreement with Illumina;

our plans and ability to develop and commercialize new solutions for the surveillance of heart, kidney, and other solid organ transplant recipients;

our plans and ability to continue updating our products, services and technology to maintain our leading position in the surveillance market for solid organ transplants;

our ability to obtain additional financing on terms favorable to us, or at all;

our ability to remain eligible to use Registration Statements on Form S-3 for capital-raising transactions;

our ability to obtain, maintain and expand reimbursement coverage from payers for AlloMap, AlloSure and other future testing services, if any;

the outcome or success of our clinical trial collaborations and registry studies;

our dependence on certain of our suppliers, service providers, and other distribution partners;

our compliance with federal, state and foreign regulatory requirements;

the favorable review of our testing services and product offerings, and our future solutions, if any, in peer-reviewed publications;

our ability to protect and enforce our intellectual property rights, our strategies regarding filing additional patent applications to strengthen our intellectual property rights, and our ability to defend against intellectual property claims that may be brought against us;

our anticipated cash needs and our anticipated uses of our funds, including our estimates regarding operating expenses and capital requirements;

our ability to meet our obligations under our equity financing agreements and debt agreements;

anticipated trends and challenges in our business and the markets in which we operate;

disruptions to our business, including disruptions at our laboratories and manufacturing facilities;

our ability to retain key members of our management team;

our ability to make successful acquisitions or investments and to manage the integration of such acquisitions or investments;

our ability to successfully defend against or settle any litigation brought against us or other legal matters or disputes;

our ability to expand internationally; and

our ability to continue to comply with the requirements of being a public company.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in this prospectus, in Part I - Item 1A, "Risk Factors", in our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC on March 22, 2018, in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, as filed with the SEC on May 10, 2018 and in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, as filed with the SEC on August 9, 2018, and elsewhere in the documents incorporated by reference into this prospectus. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially and adversely from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking

statements.

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

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You should read this prospectus and the documents incorporated by reference in this prospectus with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect. We qualify all forward-looking statements by these cautionary statements.

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USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to \$50.0 million from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. There can be no assurance that, in the future, we will sell any shares under or fully utilize the sales agreement with Jefferies as a source of financing.

We currently intend to use the net proceeds from this offering for working capital and general corporate purposes, which may include capital expenditures, research and development expenditures, clinical trial expenditures, acquisitions of new technologies and investments, business combinations and the repayment, refinancing, redemption or repurchase of indebtedness or capital stock.

The precise amount and timing of the application of these proceeds will depend upon a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering and commercialization efforts, technological advances and the competitive environment for our products. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Depending on the outcome of our efforts and other unforeseen events, our plans and priorities may change and we may apply the net proceeds of this offering in different manners than we currently anticipate. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

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If you purchase our common stock in this offering, your interest will be diluted to the extent of the difference between the public offering price per share and the net tangible book value per share of our common stock after this offering. We calculate net tangible book value per share by dividing our net tangible assets (tangible assets less total liabilities) by the number of shares of our common stock issued and outstanding as of June 30, 2018.

Our net tangible book value at June 30, 2018 was \$(17.8) million, or \$(0.50) per share. After giving effect to the sale of our common stock during the term of the sales agreement with Jefferies in the aggregate amount of \$50.0 million at an assumed offering price of \$22.80 per share, the last reported sale price of our common stock on the Nasdaq Global Market on August 29, 2018, and after deducting commissions and estimated aggregate offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2018 would have been approximately \$30.3 million, or \$0.79 per share of common stock. This represents an immediate increase in the net tangible book value of \$1.29 per share to our existing stockholders and an immediate dilution in net tangible book value of \$22.01 per share to new investors. The following table illustrates this per share dilution:

Assumed public offering price per share	\$ 22.80
Net tangible book value per share as of June 30, 2018	\$ (0.50)
Increase in net tangible book value per share attributable to this offering	\$ 1.29
As adjusted net tangible book value per share as of June 30, 2018, after giving effect to this offering	\$ 0.79
Dilution per share to new investors purchasing shares in this offering	\$ 22.01

The table above assumes for illustrative purposes that an aggregate of 2,192,982 shares of our common stock are sold during the term of the sales agreement with Jefferies at a price of \$22.80 per share, the last reported sale price of our common stock on the Nasdaq Global Market on August 29, 2018, for aggregate net proceeds of approximately \$48.2 million, after deducting commissions and estimated aggregate offering expenses payable by us. The as adjusted information is illustrative only and will adjust based on the actual price to the public, the actual number of shares sold and other terms of the offering determined at the time shares of our common stock are sold pursuant to this prospectus. The shares pursuant to the sales agreement with Jefferies are being sold from time to time at various prices. An increase of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$22.80 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$50.0 million during the term of the sales agreement with Jefferies is sold at that price, would increase our as adjusted net tangible book value per share after the offering to \$0.80 per share and would increase the dilution in net tangible book value per share to new investors in this offering to \$23.00 per share, after deducting commissions and estimated aggregate offering expenses payable by us. A decrease of \$1.00 per share in the price at which the shares are sold from the assumed offering price of \$22.80 per share shown in the table above, assuming all of our common stock in the aggregate amount of \$50.0 million during the term of the sales agreement with Jefferies is sold at that price, would result in our as adjusted net tangible book value per share after the offering remaining at \$0.79 per share but would decrease the dilution in net tangible book value per share to new investors in this offering to \$21.01 per share, after deducting commissions and estimated aggregate offering expenses payable by us. This information is supplied for illustrative purposes only.

The above discussion and table are based on 35,975,493 shares of our common stock issued and outstanding as of June 30, 2018 and excludes the following:

896,904 shares of our common stock issuable upon the vesting of restricted stock units outstanding under our equity incentive plans as of June 30, 2018, with a weighted-average grant date fair value of \$8.83 per share;

2,561,458 shares of our common stock issuable upon the exercise of stock options outstanding under equity incentive plans as of June 30, 2018, at a weighted-average exercise price of \$6.57 per share;

26,844 shares of our common stock reserved for future issuance under our 2016 Inducement Plan as of June 30, 2018;

647,249 shares of our common stock reserved for future issuance under our 2014 Equity Incentive Plan as of June 30, 2018;

372,568 shares of our common stock reserved for future issuance under our 2014 Employee Stock Purchase Plan as of June 30, 2018; and

3,328,089 shares of our common stock issuable upon the exercise of outstanding warrants as of June 30, 2018, at a weighted-average exercise price of \$5.08 per share.

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To the extent that options or warrants outstanding as of June 30, 2018 have been or are exercised, or other shares are issued, investors purchasing shares in this offering could 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 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.

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PLAN OF DISTRIBUTION

We have entered into the sales agreement with Jefferies, dated August 31, 2018, under which we may issue and sell from time to time up to \$50.0 million of shares of our common stock through Jefferies as our sales agent. This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. The sales agreement has been filed as an exhibit to the registration statement of which this prospectus forms a part.

Sales of shares of our common stock, if any, under this prospectus may be made in sales deemed to be at-the-market equity offerings as defined in Rule 415 promulgated under the Securities Act including sales made directly on or through the Nasdaq Global Market, the existing trading market for our common stock, sales made to or through a market maker other than on an exchange or otherwise, in negotiated transactions at market prices, and/or any other method permitted by law.

When requested by us, Jefferies will offer the shares of common stock subject to the terms and conditions of the sales agreement, which may be on a daily basis for periods of time, or as we may otherwise agree with Jefferies. We will designate the maximum amount of shares of common stock to be sold through Jefferies when we request Jefferies to do so. Jefferies has agreed, subject to the terms and conditions of the sales, to use its commercially reasonable efforts to execute our orders to sell, as our sales agent and on our behalf, shares of our common stock submitted to Jefferies from time to time by us, consistent with its normal sales and trading practices. We may instruct Jefferies not to place shares of common stock at or below a price designated by us. We or Jefferies may suspend the offering of shares of common stock under the sales agreement upon proper notice to the other party.

If we and Jefferies so agree, Jefferies may act as principal in connection with the placement of the securities offered hereby.

We will pay Jefferies a commission equal to 3.0% of the gross proceeds of any shares sold through it pursuant to this prospectus, and reimburse Jefferies for up to \$50,000 of its expenses, including fees and disbursements to its legal counsel. The estimated offering expenses payable by us, in addition to such commission and expenses, are approximately \$350,000, which includes legal, accounting and printing costs and various other fees associated with registering the shares of common stock. The remaining sale proceeds, after deducting any other transaction fees, will equal our net proceeds from the sale of such shares.

Jefferies will provide written confirmation to us following the close of trading on the Nasdaq Global Market each day on which shares of common stock are sold under the sales agreement. Each confirmation will include the number of shares sold on that day, the aggregate gross proceeds of such sales and the commission payable by us to Jefferies. Settlement for sales of common stock will occur, unless otherwise agreed, on the second business day following the date on which such sales were made. Sales of our common stock as contemplated in this prospectus will be settled through the facilities of The Depository Trust Company or by such other means as we and Jefferies may agree upon. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sale of our common stock on our behalf, Jefferies will be deemed to be an underwriter within the meaning of the Securities Act, and the compensation paid to Jefferies will be deemed to be underwriting commissions or discounts.

We have agreed to indemnify Jefferies against certain liabilities, including liabilities under the Securities Act, and liabilities arising from breaches of representations and warranties contained in the sales agreement. We have also agreed to contribute to payments Jefferies may be required to make in respect of such liabilities.

The offering of shares of common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all shares of common stock subject to the sales agreement, or (ii) the termination of the sales agreement according to its terms by either Jefferies or us. We and Jefferies may each terminate the sales agreement at any time by giving advance written notice to the other party as required by the sales agreement.

Jefferies has provided, and may in the future provide, various investment banking, commercial banking, financial advisory and other services to us and our affiliates for which services it has received, and may in the future receive, customary fees. In the course of its business, Jefferies may actively trade our securities for its own account or for the accounts of customers, and, accordingly, Jefferies may at any time hold long or short positions in such securities.

This prospectus in electronic format may be made available on a website maintained by Jefferies and Jefferies may distribute this prospectus electronically.

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LEGAL MATTERS

Certain legal matters relating to the issuance of the common stock offered by this prospectus will be passed upon for us by Paul Hastings LLP, Palo Alto, California. Latham & Watkins LLP, San Diego, California, is acting as counsel for Jefferies in connection with this offering.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2017, as set forth in their report, which is incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are a reporting company and file annual, quarterly and current reports, proxy statements and other information with the SEC. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities being offered under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities being offered under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including CareDx, Inc. The SEC's Internet site can be found at <http://www.sec.gov>.

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INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference information into this prospectus, which means that we can disclose important information to you by referring you to another document filed separately with the SEC. The documents incorporated by reference into this prospectus contain important information that you should read about us.

The following documents are incorporated by reference into this prospectus:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2017, filed with the SEC on March 22, 2018;
- (b) The Registrant's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 30, 2018;
- (c) The Registrant's Quarterly Reports on Form 10-Q for (i) the quarter ended March 31, 2018, filed with the SEC on May 10, 2018, and (ii) the quarter ended June 30, 2018, filed with the SEC on August 9, 2018;
- (d) The Registrant's Amendment No. 1 to Quarterly Report on Form 10-Q/A for the quarter ended June 30, 2018, filed with the SEC on October 9, 2018;
- (e) The Registrant's Current Reports on Form 8-K filed with the SEC on (i) March 1, 2018, (ii) April 16, 2018, (iii) April 18, 2018, (iv) May 8, 2018, (v) June 26, 2018, (vi) June 28, 2018, and (vii) August 6, 2018; and
- (f) The description of the Registrant's common stock set forth in the Registrant's Registration Statement on Form 8-A (File No. 001-36536), filed with the SEC on July 11, 2014, including any amendments or reports filed for the purpose of updating such description.

We also incorporate by reference any future filings (other than current reports 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 unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus is a part and prior to effectiveness of such registration statement, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus and will become a part of this prospectus from the respective dates that such documents are filed with the SEC. Any statement contained herein or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof to the extent that a statement contained herein or in any other subsequently filed document which is also incorporated or deemed to be incorporated herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

The documents incorporated by reference into this prospectus are also available on our corporate website at www.caredx.com under the heading Investors. Information contained on, or that can be accessed through, our website is not part of this prospectus, and you should not consider information on our website to be part of this report unless specifically incorporated herein by reference. You may obtain copies of the documents incorporated by reference in

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this prospectus from us free of charge by requesting them in writing or by telephone at the following address:

CareDx, Inc.

3260 Bayshore Boulevard

Brisbane, CA 94005

Attn: Investor Relations

Telephone Number: (415) 287-2300

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\$50,000,000

Common Stock

PROSPECTUS

Jefferies

October 11, 2018