SANUWAVE Health, Inc.
Form S-1/A
June 10, 2011

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As filed with the Securities and Exchange Commission on June 10, 2011
Registration No. 333-174102

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
SANUWAVE Health, Inc.

(Exact name of registrant as specified in its charter)

Nevada	**3841**	**20-1176000**
(State or other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

11680 Great Oaks Way, Suite 350
Alpharetta, Georgia 30022
(770) 419-7525
(Address, including zip code, and telephone number, including area code, of registrant s principal executive offices)

Christopher M. Cashman
President and Chief Executive Officer
SANUWAVE Health, Inc.
11680 Great Oaks Way, Suite 350
Alpharetta, Georgia 30022
(770) 419-7525
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies of all communications, including communications sent to agent for service, should be sent to:

John C. Ethridge, Jr., Esq.
Smith, Gambrell & Russell, LLP
Promenade II, Suite 3100
1230 Peachtree Street, N.E.
Atlanta, Georgia 30309
(404) 815-3500

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

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: þ

If this Form is filed to registered additional securities for an offering pursuant to Rule 462(b) 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. o

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. o

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. o

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

Large accelerated filer o	Accelerated filer o	Non-accelerated filer o (Do not check if a smaller reporting company)	Smaller reporting company þ

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per unit (2)	Proposed maximum aggregate offering price	Amount of registration fee (4)
Common Stock, $0.001 par value	2,804,593	$ 4.08	$ 11,442,739	$ 1,328.50
Common Stock, $0.001 par value (3)	2,897,673	$ 4.08	$ 11,822,506	$ 1,372.59
Total Registration Fee	5,702,266	$ 4.08	$ 23,265,245	$ 2,701.09

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, the shares of common stock registered for resale by the selling stockholders also include such indeterminate number of shares of common stock as may be issued from time to time with respect to shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457 under the Securities Act of 1933, as amended, based on the per share average of the high and low reported prices for the common stock on the Over the Counter Bulletin Board as of June 7, 2011.

(3) Represents shares of common stock issuable upon the exercise of the warrants.

(4) The required registration fee has been previously paid by the Company.

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 which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. Our selling stockholders may not sell these securities described herein until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell the securities and we are not soliciting offers to buy these securities in any state or jurisdiction where the offer or sale is not permitted.

Subject to Completion, Dated _____, 2011

5,702,266 Shares

Common Stock

This prospectus relates to the sale of up to 5,702,266 shares of our common stock. $0.001 par value (the Common Stock) by the selling stockholders listed in this prospectus. These shares consist of 2,804,593 outstanding shares of Common Stock and 2,897,673 shares of Common Stock issuable upon the exercise of warrants. The shares offered by this prospectus may be sold by the selling stockholders from time to time in the over-the-counter market or other national securities exchange or automated interdealer quotation system on which our Common Stock is then listed or quoted, through negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices, or otherwise in compliance with the Plan of Distribution contained herein.

We are registering these shares following our April 2011 private placement. We will receive none of the proceeds from the sale of the shares by the selling stockholders. We may receive proceeds upon the exercise of outstanding warrants for shares of Common Stock covered by this prospectus if the warrants are exercised for cash. We will bear all expenses of registration incurred in connection with this offering, but all selling and other expenses incurred by the selling stockholders will be borne by them.

Our Common Stock is quoted on the OTC Bulletin Board under the symbol SNWV.OB. The high and low bid prices for shares of our Common Stock on June 7, 2011, were $4.00 and $4.15 per share, respectively, based upon bids that represent prices quoted by broker-dealers on the OTC Bulletin Board. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commissions, and may not represent actual transactions.

An investment in these securities involves a high degree of risk.
Please carefully review the section titled Risk Factors beginning on page 5.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is _____, 2011

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PROSPECTUS SUMMARY

This summary highlights selected information contained in greater detail elsewhere in this prospectus. This summary may not contain all of the information that you should consider before investing in our Common Stock. You should carefully read the entire prospectus, including Risk Factors and the consolidated financial statements, before making an investment decision.

Our Company

We are an emerging global regenerative medicine company focused on the development and commercialization of non-invasive, biological response activating devices for the repair and regeneration of tissue, musculoskeletal and vascular structures. Our portfolio of products and product candidates activate biologic signaling and angiogenic responses, including new vascularization and microcirculatory improvement, helping to restore the body s normal healing processes and regeneration. We intend to apply our Pulsed Acoustic Cellular Expression (PACE) technology in wound healing, orthopedic/spine, plastic/cosmetic and cardiac conditions.

Product Overview

Our lead device product for the global wound care market, dermaPACE®, has recently completed its pivotal Phase III, Investigational Device Exemption (IDE) trial in the United States for the treatment of diabetic foot ulcers. We received permission by the United States Food and Drug Administration (the FDA) through the acceptance of our shell application in August 2010 to file the pre-market approval (PMA) for dermaPACE in a series of three sections or modules. The first module included preclinical data and results of prior clinical testing and was filed in December 2010. The second module, containing a quality manufacturing system review, was submitted in January 2011. We expect to file the third module containing data from the recently completed pivotal Phase III clinical trial of dermaPACE to treat diabetic foot ulcers, proposed product labeling and a summary of safety and effectiveness in the second quarter of 2011. The dermaPACE has received the European Conformity Marking (CE Mark) allowing for commercial use on acute and chronic defects of the skin and subcutaneous soft tissue.

We research, design, manufacture, market and service our products worldwide and believe we have already demonstrated that our PACE technology is safe and effective in stimulating healing in chronic conditions of the foot and the elbow through our United States FDA Class III PMA approved Ossatron® device, and in the stimulation of bone and chronic tendonitis regeneration in the musculoskeletal environment through the utilization of our Ossatron, Evotron, and newly introduced orthoPACE devices in Europe.

We are focused on developing our PACE technology to activate healing in:

- wound conditions, including diabetic foot ulcers, venous ulcers, pressure sores, burns and other skin eruption conditions;
- orthopedic/spine applications, such as speeding the healing of fractures (including nonunion or delayed-union conditions), improving bone density in osteoporosis, fusing bones in the extremities and spine, eliminating chronic pain in joints from trauma or arthritis, and other potential sports injury applications;
- plastic/cosmetic applications such as cellulite smoothing, graft and transplant acceptance, skin tightening, scarring and other potential aesthetic uses; and
- cardiac applications for removing plaque due to atherosclerosis and improving heart muscle performance.

Market Trends

We are focused on the development of products that treat unmet medical needs in large market opportunities. Currently, there are limited biological or mechanical therapies to activate the healing and regeneration of tissue, bone and vascular structures. As baby boomers age, the incidence of their targeted diseases and musculoskeletal injuries and ailments will be far more prevalent. We believe that our PACE technology is well positioned to address many of these issues. We believe that our PACE technology, in promoting tissue regeneration, can be effective in a broad array of applications and address unmet medical needs in wound healing, orthopedic/spine, plastic/cosmetic and cardiac conditions.

Our primary interest is developing our lead product candidate, dermaPACE, for the global wound care market, with the first focus in the United States on diabetic foot ulcers. Diabetes is common, disabling and deadly. In the United States, diabetes has reached epidemic proportions. According to the American Diabetes Association, about 25.8 million people (8.3% of the total United States population) have diabetes, and nearly two million new cases are diagnosed in people aged 20 years or older each year. If current trends continue, 1 in 3 Americans will develop diabetes at some point in their lifetime, and those with diabetes will lose, on average, 10-15 years of life expectancy. Importantly, up to 25% of people with diabetes will develop a diabetic foot ulcer, resulting in 3 million diabetic foot ulcers annually in the United States alone. More than half of all foot ulcers will become infected, thus requiring hospitalization, and 1 in 5 will require an amputation that carries a high risk of mortality. Diabetes puts tremendous economic pressure on the United States healthcare system. In January 2011, the Centers for Disease Control and Prevention (the CDC) reported the total costs (direct and indirect) of diabetes in the United States is $174

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billion annually, and people with diagnosed diabetes have medical expenditures that are over two times higher than medical expenditures for people without diabetes. Hospitalization costs alone are $16,000 to $20,000 for a patient with a diabetic foot ulcer, and direct and indirect costs of an amputation range from $20,000 to $60,000 per patient. Advanced, cost-effective treatment modalities for diabetes and its comorbidities, including diabetic foot ulcers, are in great need, yet in short supply, globally. According to the American Diabetes Association, by the year 2025 the prevalence of diabetes is expected to rise by 72% to 324 million people worldwide.

A majority of challenging wounds are non-healing chronic wounds. These wounds often involve physiologic, complex and multiple complications such as reduced blood supply, compromised lymphatic systems or immune deficiencies that interfere with the body s normal wound healing processes. In addition, diabetic ulcers and pressure ulcers are often slow-to-heal wounds. These wounds often develop due to a patient s impaired vascular and tissue repair capabilities. These conditions can also inhibit a patient s healing process, and often fail to heal for many months, and sometimes, for several years. Wounds that are difficult to treat do not always respond to traditional therapies, which include hydrocolloids, hydrogels and alginates. We believe that physicians and hospitals need a therapy that addresses the special needs of these wounds with high levels of both clinical and cost effectiveness.

Strategy

Our objective is to be a leader in the development and commercialization of novel, biological response activating devices to treat tissue, musculoskeletal and vascular structure conditions. Our main vehicle for growth is the development and commercialization of our PACE technology. Our immediate goal involves leveraging the knowledge we gained from our existing human heel, elbow and bone indications to enter the advanced wound care market with innovative treatments.

We intend to use our proprietary technologies and know-how in the use of high energy, acoustic pressure waves in the shockwave spectrum to address unmet medical needs in wound care, orthopedics/spine, plastic/cosmetic and cardiac indications. We have a track record of developing products by relying on our products that have been previously authorized for marketing by the FDA and by leveraging the lessons learned from those previous experiences as the cornerstone for further development and regulatory approvals. We will seek to repeat this process of utilizing FDA-cleared or approved components in our subsequent product candidates. However, we cannot be certain that this strategy will accelerate the regulatory approval process for our product candidates, or that we will obtain such approval.

We believe the ability of our legacy products, such as Ossatron, to safely stimulate and reestablish normal healing in chronic conditions indicates the potential successful use of dermaPACE and our other product candidates to stimulate and reinstitute the normal healing process through angiogenesis. We believe that much of the data and experience generated as part of the clinical development will be useful in gaining the required approval of our product candidates, including product manufacturing procedures and records, stability test results, analytical test methodology, pre-clinical and human safety test results, and, potentially, efficacy information.

Risks Associated with Our Business

Our business is subject to numerous risks, as more fully described in the section entitled Risk Factors immediately following this prospectus summary. We have a limited operating history and have incurred substantial losses since inception. We expect to continue to incur losses for the foreseeable future and are unable to predict the extent of future losses or when we will become profitable, if at all. All of our products are in various stages of development and clinical trials and have not yet received regulatory approval in the United States. Our ability to generate revenue in the future will depend heavily on the successful development and commercialization of our product candidates. Even if we succeed in developing and commercializing one or more of our product candidates, we may never generate sufficient sales revenue to achieve and sustain profitability. We may be unable to maintain and protect our intellectual property, which could have a substantial impact on our ability to generate revenue. Our products are subject to regulation by governmental authorities in the United States and in other countries. Failure to comply with such regulations or to receive the necessary approvals or clearances for our product and product candidates may have a material adverse effect on our business.

Trading Market

Our common stock, $.001 par value (the Common Stock), is quoted on the Over-The-Counter Bulletin Board under the symbol SNWV.OB.

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Corporate Information

We were incorporated in the State of Nevada on May 6, 2004, under the name Rub Music Enterprises, Inc. (RME). SANUWAVE, Inc. was incorporated in the State of Delaware on July 21, 2005. In December 2006, Rub Music Enterprises, Inc. ceased operations and became a shell corporation.

On September 25, 2009, RME and RME Delaware Merger Sub, Inc., a Nevada corporation and wholly-owned subsidiary of RME (the Merger Sub) entered into a reverse merger agreement with SANUWAVE, Inc. Pursuant to the Merger Agreement, the Merger Sub merged with and into SANUWAVE, Inc., with SANUWAVE, Inc. as the surviving entity (the Merger) and a wholly-owned subsidiary of the Company.

In November 2009, we changed our name to SANUWAVE Health, Inc. Our principal executive offices are located at 11680 Great Oaks Way, Suite 350, Alpharetta, Georgia 30022, and our telephone number is (678) 581-6843. Our website address is *www.sanuwave.com*. The information on our website is not a part of this prospectus.

Unless the context requires otherwise, the words SANUWAVE, we, Company, us, and our in this prospec refer to SANUWAVE Health, Inc.

About this Offering

This prospectus relates to the public offering, which is not being underwritten, of up to 5,702,266 shares of our Common Stock by the selling stockholders listed in this prospectus. These shares consist of 2,804,593 outstanding shares of Common Stock and 2,897,673 shares of Common Stock issuable upon the exercise of warrants. The shares offered by this prospectus may be sold by the selling stockholders from time to time in the over-the-counter market or other national securities exchange or automated interdealer quotation system on which our Common Stock is then listed or quoted, through negotiated transactions or otherwise at market prices prevailing at the time of sale or at negotiated prices. We will receive none of the proceeds from the sale of the shares by the selling stockholders. We may receive proceeds upon exercise of outstanding warrants for shares of Common Stock covered by this prospectus if the warrants are exercised for cash. We will bear all expenses of registration incurred in connection with this offering, but all selling and other expenses incurred by the selling stockholders will be borne by them.

The shares of Common Stock being offered by this prospectus relate to shares of Common Stock and warrants issued in our April 2011 private placement to 28 accredited investors of 2,804,593 shares of our Common Stock at a purchase price of $3.25 per share, for gross proceeds to the Company of $9,114,927. The net proceeds received by the Company were $8,467,121, net of offering costs of $647,806. As part of the private placement, the investors were issued five-year warrants to purchase up to 2,804,593 shares of our Common Stock at an initial exercise price of $4.00 per share. Rodman & Renshaw, LLC, the placement agent for the private placement, was issued five-year warrants to purchase up to 93,080 shares of our Common Stock at an initial exercise price of $4.00 per share. For a more detailed discussion regarding the private placement, please see Selling Stockholders April 2011 Private Placement in this prospectus.

The number of shares being offered by this prospectus represents approximately 24.0% of our outstanding shares of Common Stock (assuming the exercise of the warrants included in the number of shares covered by this prospectus) as of June 7, 2011.

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THE OFFERING

Common Stock being offered by the selling stockholders:

Shares of Common Stock	2,804,593 shares
Shares of Common Stock that may be issued upon the exercise of warrants	2,897,673 shares
Total	5,702,266 shares
Common Stock outstanding	20,907,536 shares (1)
OTC Bulletin Board symbol	SNWV.OB
Use of Proceeds	We will not receive any of the proceeds from the sale of the shares by the selling stockholders, except cash for the warrant exercise price upon exercise of the warrants, which would be used for working capital purposes.
Risk Factors	See Risk Factors beginning on page 5 and other information included in this prospectus for a discussion of factors you should consider before investing in shares of our Common Stock.

(1) The number of shares shown to be outstanding is based on the number of shares of our Common Stock outstanding as of June 7, 2011, and does not include shares reserved for issuance upon the exercise of warrants outstanding, or options granted or available under our equity compensation plans.

SUMMARY FINANCIAL INFORMATION

The summary financial information set forth below is derived from and should be read in conjunction with our consolidated financial statements, including the notes thereto, appearing at the end of this prospectus.

	Three Months Ended March 31, 2011 (Unaudited)	Three Months Ended March 31, 2010 (Unaudited)	Year Ended December 31, 2010	Year Ended December 31, 2009
Consolidated Statement of Operations Data				
Revenues	$ 251,753	$ 143,102	$ 728,446	$ 660,725
Net loss	$ (2,183,326)	$ (2,994,755)	$(14,922,441)	$ (6,153,040)
Weighted average shares outstanding	16,143,655	12,509,657	12,924,872	11,405,490
Net loss per share basic and diluted	$ (0.14)	$ (0.24)	$ (1.15)	$ (0.54)
Consolidated Balance Sheet Data (at end of period)				
Working capital (deficit)	$ (5,066,300)	$ (2,221,427)	$ (7,029,635)	$ (187,459)

Total assets	$ 5,014,670	$ 4,950,454	$ 3,029,299	$ 5,867,085
Total liabilities	$ 13,650,417	$ 13,346,821	$ 13,545,500	$ 11,751,399
Total stockholders equity (deficit)	$ (8,635,747)	$ (8,396,367)	$ (10,516,201)	$ (5,884,314)

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RISK FACTORS

Investing in our Common Stock involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in this prospectus, including the consolidated financial statements and the related notes appearing at the end of this prospectus, before purchasing our Common Stock. If any of the following risks actually occur, they may materially harm our business and our financial condition and results of operations. In any such event, the market price of our Common Stock could decline and you could lose all or part of your investment.

Risks Related to Our Business

We have a history of losses and we expect to continue to incur losses and may not achieve or maintain profitability.

We have invested and continue to invest a significant portion of our time and resources in developing and testing our PACE product candidates, with current emphasis on dermaPACE. As a result of our significant research, clinical development, regulatory compliance and general and administrative expenses, we expect to incur losses for at least the next several years as we continue to incur expenses for seeking FDA approval for our dermaPACE device and then commercialization in the United States after FDA approval. As of March 31, 2011, we had an accumulated deficit of $56.5 million. We continue to focus our expertise and future development efforts on the development of our PACE technology in wound care, orthopedic/spine, plastic/cosmetic and cardiac applications. Even if we succeed in developing and commercializing one or more of our product candidates, we may not be able to generate sufficient revenues and we may never achieve or be able to maintain profitability.

Current economic conditions could adversely affect our operations.

According to the National Bureau of Economic Research, the United States economy was in a recession from December 2007 through June 2009. This economic downturn was the longest recession since World War II. The related instability of markets have impacted us in the short term by making it difficult to raise the necessary capital to fund our research and development programs, as well as the infrastructure needed to plan for follow-on programs, upcoming regulatory submissions, product approvals, market launches and insurance reimbursement interactions. In addition, any change in the economy as a result of this long recession may impact the demand for medical procedures that we are targeting with our product candidates, or may impact the pricing of our products. Since our anticipated United States product launch for our lead product device, dermaPACE, remains up to a year away, the impact of the recession on commercial markets for that product remains uncertain.

There is a risk that one or more suppliers, clinical investigators, consultants and other partners may encounter difficulties during these challenging economic times, which would directly affect our ability to attain our operating goals on schedule and on budget.

The current economic conditions may also adversely affect our potential customers, including patients, medical professionals and their practices, hospitals and other healthcare providers. These conditions may also impact the overall amount spent on healthcare generally. This could result in a decrease in the demand for our products, longer sales cycles, slower adoption of our new technology and increased price competition.

Our product candidates may not be developed or commercialized successfully.

Our product candidates are based on a technology that often times has not been used previously in the manner we propose and must compete with more established treatments currently accepted as the standards of care. Market acceptance of our products will largely depend on our ability to demonstrate their relative safety, efficacy, cost-effectiveness and ease of use.

We are subject to the risks that:

- the FDA or a foreign regulatory authority finds our product candidates ineffective or unsafe;
- we do not receive necessary regulatory approvals;
- we are unable to get our product candidates in commercial quantities at reasonable costs; and
- the patient and physician community does not accept our product candidates.

In addition, our product development program may be curtailed, redirected, eliminated or delayed at any time for many reasons, including:

adverse or ambiguous results;

undesirable side effects that delay or extend the trials;

the inability to locate, recruit, qualify and retain a sufficient number of clinical investigators or patients for our trials; and

regulatory delays or other regulatory actions.

We cannot predict whether we will successfully develop and commercialize our product candidates. If we fail to do so, we will not be able to generate substantial revenues, if any.

The medical device/therapeutic product industries are highly competitive and subject to rapid technological change. If our competitors are better able to develop and market products that are safer and more effective than any products we may develop, our commercial opportunities will be reduced or eliminated.

Our success depends, in part, upon our ability to maintain a competitive position in the development of technologies and products. We face competition from established medical device, pharmaceutical and biotechnology companies, as well as from academic institutions, government agencies, and private and public research institutions in the United States and abroad. Many of our principal competitors have significantly greater financial resources and expertise than we do in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with, or mergers with, or acquisitions by large and established companies, or through the development of novel products and technologies.

The industry in which we operate has undergone, and we expect it to continue to undergo, rapid and significant technological change, and we expect competition to intensify as technological advances are made. Our competitors may develop and commercialize pharmaceutical, biotechnology or medical devices that are safer or more effective, have fewer side effects or are less expensive than any products that we may develop. We also compete with our competitors in recruiting and retaining qualified scientific and management personnel, in establishing clinical trial sites and patient registration for clinical trials, and in acquiring technologies and technology licenses complementary to our programs or advantageous to our business.

If our products and product candidates do not gain market acceptance among physicians, patients and the medical community, we may be unable to generate significant revenues, if any.

Even if we obtain regulatory approval for our product candidates, they may not gain market acceptance among physicians, healthcare payers, patients and the medical community. Market acceptance will depend on our ability to demonstrate the benefits of our approved products in terms of safety, efficacy, convenience, ease of administration and cost effectiveness. In addition, we believe market acceptance depends on the effectiveness of our marketing strategy, the pricing of our approved products and the reimbursement policies of government and third party payers. Physicians may not prescribe our approved products for a variety of reasons and patients may determine for any reason that our product is not useful to them. If any of our approved products fail to achieve market acceptance, our ability to generate revenues will be limited.

We currently purchase most of our product component materials from single suppliers. If we are unable to obtain product component materials and other products from our suppliers that we depend on for our operations, our ability to deliver our products to market will likely be impeded.

We depend on suppliers for product component materials and other components that are subject to stringent regulatory requirements. We currently purchase most of our product component materials from single suppliers and the loss of any of these suppliers could result in a disruption in our production. If this were to occur, it may be difficult to arrange a replacement supplier because certain of these materials may only be available from one or a limited number of sources. Our suppliers may encounter problems during manufacturing due to a variety of reasons, including failure to follow specific protocols and procedures, failure to comply with applicable regulations, equipment malfunction and environmental factors. In addition, establishing additional or replacement suppliers for these materials may take a substantial period of time, as certain of these suppliers must be approved by regulatory authorities.

If we are unable to secure on a timely basis sufficient quantities of the materials we depend on to manufacture our products, if we encounter delays or contractual or other difficulties in our relationships with these suppliers, or if we cannot find replacement suppliers at an acceptable cost, then the manufacturing of our products may be disrupted, which could increase our costs and have a material adverse effect on our revenues.

The loss of our key management and scientific personnel would likely hinder our ability to execute our business plan.

As a small company with 29 employees, our success depends on the continuing contributions of our management team and scientific personnel, and on maintaining relationships with the network of medical and

academic centers that conduct our clinical trials. We depend on the services of our key scientific employees and principal members of our management team. Our success depends in large part on our ability to attract and retain highly qualified personnel. We face intense competition in our hiring efforts from other pharmaceutical, biotechnology and medical device companies, as well as from universities and nonprofit research organizations, and we may have to pay higher salaries to attract and retain qualified personnel. The loss of one or more of these individuals, or our inability to attract additional qualified personnel, could substantially impair our ability to implement our business plan.

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We face an inherent risk of liability in the event that the use or misuse of our product candidates results in personal injury or death.

The use of our product candidates in clinical trials and the sale of any approved products may expose us to product liability claims which could result in financial loss. Our clinical and commercial product liability insurance coverage may not be sufficient to cover claims that may be made against us. In addition, we may not be able to maintain insurance coverage at a reasonable cost, or in sufficient amounts or scope, to protect us against losses. Any claims against us, regardless of their merit, could severely harm our financial condition, strain our management team and other resources, and adversely impact or eliminate the prospects for commercialization of the product candidate, or sale of the product, which is the subject of any such claim. Although we do not promote any off-label use, off-label uses of products are common and the FDA does not regulate a physician s choice of treatment. Off-label uses of any product for which we obtain approval may subject us to additional liability.

Regulatory Risks

The results of our clinical trials may be insufficient to obtain regulatory approval for our product candidates.

We will only receive regulatory approval to commercialize a product candidate if we can demonstrate to the satisfaction of the FDA or the applicable foreign regulatory agency, in well designed and conducted clinical trials, that the product candidate is safe and effective. If we are unable to demonstrate that a product candidate will be safe and effective in advanced clinical trials involving larger numbers of patients, we will be unable to submit the necessary application to receive regulatory approval to commercialize the product candidate. We face risks that:

the product candidate may not prove to be safe or effective;

the product candidate s benefits may not outweigh its risks;

the results from more advanced clinical trials may not confirm the positive results from pre-clinical studies and early clinical trials;

the FDA or comparable foreign regulatory authorities may interpret data from pre-clinical and clinical testing in different ways than us; and

the FDA or other regulatory agencies may require additional or expanded trials.

We are subject to extensive governmental regulation, including the requirement of FDA approval or clearance, before our product candidates may be marketed.

The process of obtaining FDA approval is lengthy, expensive and uncertain, and we cannot be sure that our product candidates will be approved in a timely fashion, or at all. If the FDA does not approve or clear our product candidates in a timely fashion, or at all, our business and financial condition would likely be adversely affected. We cannot be sure that the FDA will not select a different center and/or different legal authority for our other product candidates, in which case the path to regulatory approval would be different and could be more lengthy and costly.

Both before and after approval or clearance of our product candidates, we, our product candidates, our suppliers, our contract manufacturers and our contract testing laboratories are subject to extensive regulation by governmental authorities in the United States and other countries. Failure to comply with applicable requirements could result in, among other things, any of the following actions:

warning letters;

fines and other monetary penalties;

unanticipated expenditures;

delays in FDA approval and clearance, or FDA refusal to approve or clear a product candidate;

product recall or seizure;

interruption of manufacturing or clinical trials;

operating restrictions;

injunctions; and

criminal prosecutions.

In addition to the approval and clearance requirements, other numerous and pervasive regulatory requirements apply, both before and after approval or clearance, to us, our products and product candidates, and our suppliers, contract manufacturers and contract laboratories. These include requirements related to the following:

testing;

manufacturing;

quality control;

labeling;

advertising;

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promotion;

distribution;

export;

reporting to the FDA certain adverse experiences associated with the use of the products; and

obtaining additional approvals or clearances for certain modifications to the products or their labeling or claims.

We are also subject to inspection by the FDA to determine our compliance with regulatory requirements, as are our suppliers, contract manufacturers and contract testing laboratories, and we cannot be sure that the FDA will not indentify compliance issues that may disrupt production or distribution, or require substantial resources to correct.

The FDA s requirements may change and additional government regulations may be promulgated that could affect us, our product candidates, and our suppliers, contract manufacturers and contract laboratories. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action. There can be no assurance that we will not be required to incur significant costs to comply with such laws and regulations in the future, or that such laws or regulations will not have a material adverse effect upon our business.

Federal regulatory reforms may adversely affect our ability to sell our products profitably.

From time to time, legislation is drafted and introduced in the United States Congress that could significantly change the statutory provisions governing the clearance or approval, manufacture and marketing of a device. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether legislative changes will be enacted or FDA regulations, guidance or interpretations changed, and what the impact of such changes, if any, may be.

Failure to obtain regulatory approval in foreign jurisdictions will prevent us from marketing our products abroad.

International sales of our products and any of our product candidates that we commercialize are subject to the regulatory requirements of each country in which the products are sold. Accordingly, the introduction of our product candidates in markets outside the United States will be subject to regulatory approvals in those jurisdictions. The regulatory review process varies from country to country. Many countries impose product standards, packaging and labeling requirements, and import restrictions on medical devices. In addition, each country has its own tariff regulations, duties and tax requirements. The approval by foreign government authorities is unpredictable and uncertain, and can be expensive. Our ability to market our approved products could be substantially limited due to delays in receipt of, or failure to receive, the necessary approvals or clearances.

Prior to marketing our products in any country outside the United States, we must obtain marketing approval in that country. Approval and other regulatory requirements vary by jurisdiction and differ from the United States requirements. We may be required to perform additional pre-clinical or clinical studies even if FDA approval has been obtained.

If we fail to obtain an adequate level of reimbursement for our approved products by third party payers, there may be no commercially viable markets for our approved products or the markets may be much smaller than expected.

The availability and levels of reimbursement by governmental and other third party payers affect the market for our approved products. The efficacy, safety, performance and cost-effectiveness of our product and product candidates, and of any competing products, will determine the availability and level of reimbursement. Reimbursement and healthcare payment systems in international markets vary significantly by country, and include both government sponsored healthcare and private insurance. To obtain reimbursement or pricing approval in some countries, we may be required to produce clinical data, which may involve one or more clinical trials, that compares the cost-effectiveness of our approved products to other available therapies. We may not obtain international reimbursement or pricing approvals in a timely manner, if at all. Our failure to receive international reimbursement or pricing approvals would negatively impact market acceptance of our approved products in the international markets in

which those approvals are sought.

We believe that future reimbursement may be subject to increased restrictions both in the United States and in international markets. Future legislation, regulation or reimbursement policies of third party payers may adversely affect the demand for our future approved products currently under development and limit our ability to sell our approved products on a profitable basis. In addition, third party payers continually attempt to contain or reduce the costs of healthcare by challenging the prices charged for healthcare products and services. If reimbursement for our approved products is unavailable or limited in scope or amount, or if pricing is set at unsatisfactory levels, market acceptance of our approved products would be impaired and our future revenues, if any, would be adversely affected.

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If we fail to comply with the United States Federal Anti-Kickback Statute and similar state laws, we could be subject to criminal and civil penalties and exclusion from the Medicare and Medicaid programs, which would have a material adverse effect on our business and results of operations.

A provision of the Social Security Act, commonly referred to as the Federal Anti-Kickback Statute, prohibits the offer, payment, solicitation or receipt of any form of remuneration in return for referring, ordering, leasing, purchasing or arranging for, or recommending the ordering, purchasing or leasing of, items or services payable by Medicare, Medicaid or any other Federal healthcare program. The Federal Anti-Kickback Statute is very broad in scope and many of its provisions have not been uniformly or definitively interpreted by existing case law or regulations. In addition, most of the states in which our approved products may be sold have adopted laws similar to the Federal Anti-Kickback Statute, and some of these laws are even broader than the Federal Anti-Kickback Statute in that their prohibitions are not limited to items or services paid for by Federal healthcare programs, but instead apply regardless of the source of payment. Violations of the Federal Anti-Kickback Statute may result in substantial civil or criminal penalties and exclusion from participation in Federal healthcare programs.

All of our financial relationships with healthcare providers and others who provide products or services to Federal healthcare program beneficiaries are potentially governed by the Federal Anti-Kickback Statute and similar state laws. We believe our operations are in compliance with the Federal Anti-Kickback Statute and similar state laws. However, we cannot be certain that we will not be subject to investigations or litigation alleging violations of these laws, which could be time-consuming and costly to us and could divert management s attention from operating our business, which in turn could have a material adverse effect on our business. In addition, if our arrangements were found to violate the Federal Anti-Kickback Statute or similar state laws, the consequences of such violations would likely have a material adverse effect on our business and results of operations.

Patients may discontinue their participation in our clinical studies, which may negatively impact the results of these studies and extend the timeline for completion of our development programs.

Clinical trials for our product candidates require sufficient patient enrollment. We may not be able to enroll a sufficient number of patients in a timely or cost-effective manner. Patients enrolled in our clinical studies may discontinue their participation at any time during the study as a result of a number of factors, including withdrawing their consent or experiencing adverse clinical events, which may or may not be judged to be related to our product candidates under evaluation. If a large number of patients in any one of our studies discontinue their participation in the study, the results from that study may not be positive or may not support a filing for regulatory approval of our product candidates.

In addition, the time required to complete clinical trials is dependent upon, among other factors, the rate of patient enrollment. Patient enrollment is a function of many factors, including the following:

- the size of the patient population;
- the nature of the clinical protocol requirements;
- the availability of other treatments or marketed therapies (whether approved or experimental);
- our ability to recruit and manage clinical centers and associated trials;
- the proximity of patients to clinical sites; and
- the patient eligibility criteria for the study.

Product quality or performance issues may be discovered through ongoing regulation by the FDA and by comparable international agencies, as well as through our internal standard quality process.

The medical device industry is subject to substantial regulation by the FDA and by comparable international agencies. In addition to requiring clearance or approval to market new or improved devices, we are subject to ongoing regulation as a device manufacturer. Governmental regulations cover many aspects of our operations, including quality systems, marketing and device reporting. As a result, we continually collect and analyze information about our

product quality and product performance through field observations, customer feedback and other quality metrics. If we fail to comply with applicable regulations or if post market safety issues arise, we could be subject to enforcement sanctions, our promotional practices may be restricted, and our marketed products could be subject to recall or otherwise impacted. Each of these potential actions could result in a material adverse effect on our operating results.

The use of hazardous materials in our operations may subject us to environmental claims or liability.

We conduct research and development and manufacturing operations in our facilities. Our research and development process may, at times, involve the controlled use of hazardous materials and chemicals. We will conduct experiments that are common in the medical device industry, in which we may use small quantities of chemicals, including those that are corrosive, toxic and flammable. The risk of accidental injury or contamination from these materials cannot be eliminated. We do not maintain a separate insurance policy for these types of risks. In the event of an accident or environmental discharge or contamination, we may be held liable for any resulting damages, and any liability could exceed our resources. We are subject to Federal, state and local laws and regulations governing the use, storage, handling and disposal of these

materials and specified waste products. The cost of compliance with these laws and regulations could be significant.

Risks Related to Intellectual Property

The protection of our intellectual property is critical to our success and any failure on our part to adequately protect those rights could materially adversely affect our business.

Our commercial success depends to a significant degree on our ability to:

- obtain and/or maintain protection for our product candidates under the patent laws of the United States and other countries;
- defend and enforce our patents once obtained;
- obtain and/or maintain appropriate licenses to patents, patent applications or other proprietary rights held by others with respect to our technology, both in the United States and other countries;
- maintain trade secrets and other intellectual property rights relating to our product candidates; and
- operate without infringing upon the patents, trademarks, copyrights and proprietary rights of third parties.

The degree of intellectual property protection for our technology is uncertain, and only limited intellectual property protection may be available for our product candidates, which may prevent us from gaining or keeping any competitive advantage against our competitors. Although we believe the patents that we own or license, and the patent applications that we own or license, generally provide us a competitive advantage, the patent positions of biotechnology, biopharmaceutical and medical device companies are generally highly uncertain, involve complex legal and factual questions and have been the subject of much litigation. Neither the United States Patent & Trademark Office nor the courts have a consistent policy regarding the breadth of claims allowed or the degree of protection afforded under many biotechnology patents. Even if issued, patents may be challenged, narrowed, invalidated or circumvented, which could limit our ability to stop competitors from marketing similar products or limit the length of term of patent protection we may have for our products. Further, a court or other government agency could interpret our patents in a way such that the patents do not adequately cover our current or future product candidates. Changes in either patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection.

We also rely upon trade secrets and unpatented proprietary know-how and continuing technological innovation in developing our products, especially where we do not believe patent protection is appropriate or obtainable. We seek to protect this intellectual property, in part, by generally requiring our employees, consultants, and current and prospective business partners to enter into confidentiality agreements in connection with their employment, consulting or advisory relationships with us, where appropriate. We also require our employees, consultants, researchers and advisors who we expect to work on our products and product candidates to agree to disclose and assign to us all inventions conceived during the work day, developed using our property or which relate to our business. We may lack the financial or other resources to successfully monitor and detect, or to enforce our rights in respect of, infringement of our rights or breaches of these confidentiality agreements. In the case of any such undetected or unchallenged infringements or breaches, these confidentiality agreements may not provide us with meaningful protection of our trade secrets and unpatented proprietary know-how or adequate remedies. In addition, others may independently develop technology that is similar or equivalent to our trade secrets or know-how. If any of our trade secrets, unpatented know-how or other confidential or proprietary information is divulged to third parties, including our competitors, our competitive position in the marketplace could be harmed and our ability to sell our products successfully could be severely compromised. Enforcing a claim that a party illegally obtained and is using trade secrets that have been licensed to us or that we own is also difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. Costly and time consuming litigation could be necessary to seek to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could have a material adverse effect on our business. Moreover,

some of our academic institution licensees, evaluators, collaborators and scientific advisors have rights to publish data and information to which we have rights. If we cannot maintain the confidentiality of our technologies and other confidential information in connection with our collaborations, our ability to protect our proprietary information or obtain patent protection in the future may be impaired, which could have a material adverse effect on our business.

In particular, we cannot assure you that:

- we or the owners or other inventors of the patents that we own or that have been licensed to us, or that may be issued or licensed to us in the future, were the first to file patent applications or to invent the subject matter claimed in patent applications relating to the technologies upon which we rely;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our patent applications will result in issued patents;
- the patents and the patent applications that we own or that have been licensed to us, or that may be issued or licensed to us in the future, will provide a basis for commercially viable products or will provide us with any competitive advantages, or will not be challenged by third parties;

the patents and the patent applications that have been licensed to us are valid and enforceable;

we will develop additional proprietary technologies that are patentable;

we will be successful in enforcing the patents that we own or license and any patents that may be issued or licensed to us in the future against third parties;

the patents of third parties will not have an adverse effect on our ability to do business; or

our trade secrets and proprietary rights will remain confidential.

Accordingly, we may fail to secure meaningful patent protection relating to any of our existing or future product candidates or discoveries despite the expenditure of considerable resources. Further, there may be widespread patent infringement in countries in which we may seek patent protection, including countries in Europe and Asia, which may instigate expensive and time consuming litigation which could adversely affect the scope of our patent protection. In addition, others may attempt to commercialize products similar to our product candidates in countries where we do not have adequate patent protection. Failure to obtain adequate patent protection for our product candidates, or the failure by particular countries to enforce patent laws or allow prosecution for alleged patent infringement, may impair our ability to be competitive. The availability of infringing products in markets where we have patent protection, or the availability of competing products in markets where we do not have adequate patent protection, could erode the market for our product candidates, negatively impact the prices we can charge for our product candidates, and harm our reputation if infringing or competing products are manufactured to inferior standards.

Patent applications owned by or licensed to us may not result in issued patents, and our competitors may commercialize the discoveries we attempt to patent.

The patent applications that we own and that have been licensed to us, and any future patent applications that we may own or that may be licensed to us, may not result in the issuance of any patents. The standards that the United States Patent & Trademark Office and foreign patent offices use to grant patents are not always applied predictably or uniformly and can change. Consequently, we cannot be certain as to the type and scope of patent claims to which we may in the future be entitled under our license agreements or that may be issued to us in the future. These applications may not be sufficient to meet the statutory requirements for patentability and, therefore, may not result in enforceable patents covering the product candidates we want to commercialize. Further, patent applications in the United States that are not filed in other countries may not be published or generally are not published until at least 18 months after they are first filed, and patent applications in certain foreign countries generally are not published until many months after they are filed. Scientific and patent publication often occurs long after the date of the scientific developments disclosed in those publications. As a result, we cannot be certain that we will be the first creator of inventions covered by our patents or applications, or the first to file such patent applications. As a result, our issued patents and our patent applications could become subject to challenge by third parties that created such inventions or filed patent applications before us or our licensors, resulting in, among other things, interference proceedings in the United States Patent & Trademark Office to determine priority of discovery or invention. Interference proceedings, if resolved adversely to us, could result in the loss of or significant limitations on patent protection for our products or technologies. Even in the absence of interference proceedings, patent applications now pending or in the future filed by third parties may prevail over the patent applications that have been or may be owned by or licensed to us or that we may file in the future, or may result in patents that issue alongside patents issued to us or our licensors or that may be issued or licensed to us in the future, leading to uncertainty over the scope of the patents owned by or licensed to us or that may in the future be owned by us or our freedom to practice the claimed inventions.

Our patents may not be valid or enforceable, and may be challenged by third parties.

We cannot assure you that the patents that have been issued or licensed to us would be held valid by a court or administrative body or that we would be able to successfully enforce our patents against infringers, including our competitors. The issuance of a patent is not conclusive as to its validity or enforceability, and the validity and enforceability of a patent is susceptible to challenge on numerous legal grounds, including the possibility of

reexamination proceedings brought by third parties in the United States Patent & Trademark Office against issued patents and similar validity challenges under foreign patent laws. Challenges raised in patent infringement litigation brought by or against us may result in determinations that patents that have been issued or licensed to us or any patents that may be issued to us or our licensors in the future are invalid, unenforceable or otherwise subject to limitations. In the event of any such determinations, third parties may be able to use the discoveries or technologies claimed in these patents without paying licensing fees or royalties to us, which could significantly diminish the value of our intellectual property and our competitive advantage. Even if our patents are held to be enforceable, others may be able to design around our patents or develop products similar to our products that are not within the scope of any of our patents.

In addition, enforcing the patents that we own or license, and any patents that may be issued to us in the future, against third parties may require significant expenditures regardless of the outcome of such efforts. Our inability to enforce our patents against infringers and competitors may impair our ability to be competitive and could have a material adverse effect on our business.

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Issued patents and patent licenses may not provide us with any competitive advantage or provide meaningful protection against competitors.

The discoveries or technologies covered by issued patents we own or license may not have any value or provide us with a competitive advantage, and many of these discoveries or technologies may not be applicable to our product candidates at all. We have devoted limited resources to identifying competing technologies that may have a competitive advantage relative to ours, especially those competing technologies that are not perceived as infringing on our intellectual property rights. In addition, the standards that courts use to interpret and enforce patent rights are not always applied predictably or uniformly and can change, particularly as new technologies develop. Consequently, we cannot be certain as to how much protection, if any, will be afforded by these patents with respect to our products if we, our licensees or our licensors attempt to enforce these patent rights and those rights are challenged in court.

The existence of third party patent applications and patents could significantly limit our ability to obtain meaningful patent protection. If patents containing competitive or conflicting claims are issued to third parties, we may be enjoined from pursuing research, development or commercialization of product candidates or may be required to obtain licenses, if available, to these patents or to develop or obtain alternative technology. If another party controls patents or patent applications covering our product candidates, we may not be able to obtain the rights we need to those patents or patent applications in order to commercialit are expressly exempted are money market instruments and senior unsecured debt instruments whose terms provide that (i) the repayment or the amount of the repayment depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued or is settled in a way other than by monetary payment, or (ii) the payment of interest or the amount of the interest payments depends on the occurrence or non-occurrence of an event which is uncertain at the point in time when the senior unsecured debt instruments are issued unless the payment of interest or the amount of the interest payments solely depends on a fixed or floating reference interest rate and is settled by monetary payment. This order of priority introduced by the Resolution Mechanism Act would apply in German insolvency proceedings instituted, or when Resolution Measures are imposed, on or after January 1, 2017 with effect for debt instruments of the Issuer outstanding at that time. In a German insolvency proceeding or in the event of the imposition of Resolution Measures with respect to the Issuer, the competent regulatory authority or court would determine which of our senior debt securities issued under the prospectus have the terms described in clauses (i) or (ii) above, referred to herein as the "**Structured Debt Securities**," and which do not, referred to herein as the "**Non-Structured Debt Securities**." We expect the securities offered herein to be classified as Structured Debt Securities, but the competent regulatory authority or court may classify the securities differently. In a German insolvency proceeding or in the event of the imposition of Resolution Measures with respect to the Issuer, the Structured Debt Securities are expected to be among the unsecured unsubordinated obligations that would bear losses after the Non-Structured Debt Securities as described above.

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Nevertheless, **you may lose some or all of your investment in the securities if a Resolution Measure becomes applicable to us**. Imposition of a Resolution Measure would likely occur if we become, or are deemed by the competent supervisory authority to have become, "non-viable" (as defined under the then applicable law) and are unable to continue our regulated banking activities without a Resolution Measure becoming applicable to us. The Bank Recovery and Resolution Directive and the Resolution Act are intended to eliminate the need for public support of troubled banks, and you should be aware that public support, if any, would only potentially be used by the competent supervisory authority as a last resort after having assessed and exploited, to the maximum extent practicable, the resolution tools, including the bail-in tool.

By acquiring the securities, you would have no claim or other right against us arising out of any Resolution Measure and we would have no obligation to make payments under the securities following the imposition of a Resolution Measure. In particular, the imposition of any Resolution Measure will not constitute a default or an event of default under the securities, under the Indenture or for the purposes of, but only to the fullest extent permitted by, the Trust Indenture Act. Furthermore, because the securities are subject to any Resolution Measure, secondary market trading in the securities may not follow the trading behavior associated with similar types of securities issued by other financial institutions which may be or have been subject to a Resolution Measure.

In addition, by your acquisition of the securities, you waive, to the fullest extent permitted by the Trust Indenture Act and applicable law, any and all claims against the trustee and the indenture agents for, agree not to initiate a suit against the trustee or the indenture agents in respect of, and agree that the trustee and the indenture agents will not be liable for, any action that the trustee or the indenture agents take, or abstain from taking, in either case in accordance with the imposition of a Resolution Measure by the competent resolution authority with respect to the securities. **Accordingly**, **you may have limited or circumscribed rights to challenge any decision of the competent resolution authority to impose any Resolution Measure**.

THE ISSUER'S ESTIMATED VALUE OF THE SECURITIES ON THE TRADE DATE WILL BE LESS THAN THE ISSUE PRICE OF THE SECURITIES — The Issuer's estimated value of the securities on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the securities. The difference between the Issue Price and the Issuer's estimated value of the securities on the Trade Date is due to the inclusion in the Issue Price of the agent's commissions, if any, and the cost of hedging our obligations under the securities through one or more of our affiliates. Such hedging cost includes our or our affiliates' expected cost of providing such hedge, as well as the profit we or our affiliates expect to realize in consideration for assuming the risks inherent in providing such hedge. The Issuer's estimated value of the securities is determined by reference to an internal funding rate and our pricing models. The internal funding rate is typically lower than the rate we would pay when we issue conventional debt securities on equivalent terms. This difference in funding rate, as well as the agent's commissions, if any, and the estimated cost of hedging our obligations under the securities, reduces the economic terms of the securities to you and is expected to adversely affect the price at which you may be able to sell the securities in any secondary market. In addition, our internal pricing models are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. If at any time a third party dealer were to quote a price to purchase your securities or otherwise value your securities, that price or value may differ materially from the estimated value of the securities determined by reference to our internal funding rate and pricing models. This difference is due to, among other things, any difference in funding rates, pricing models or assumptions used by any dealer who may purchase the securities in the secondary market.

- **INVESTING IN THE SECURITIES IS NOT THE SAME AS INVESTING IN THE UNDERLYINGS OR THE SECURITIES COMPOSING THE UNDERLYINGS** — The return on the securities may not reflect the return you would have realized if you had directly invested in the Underlyings or the securities composing the Underlyings. For instance, any Payment at Maturity on the securities is dependent on the performance of the Laggard Underlying, and you will not participate in any potential increase in the price or level, as applicable, of either Underlying, which could be significant.

- **IF THE PRICES OR LEVELS, AS APPLICABLE, OF THE UNDERLYINGS CHANGE, THE VALUE OF YOUR SECURITIES MAY NOT CHANGE IN THE SAME MANNER** — Your securities may trade quite differently from the prices or levels, as applicable, of the Underlyings. Changes in the prices or levels, as applicable, of the Underlyings may not result in comparable changes in the value of your securities.

- **NO DIVIDEND PAYMENTS OR VOTING RIGHTS** — As a holder of the securities, you will not have any voting rights or rights to receive cash dividends or other distributions or other rights that holders of the shares of the Fund or the securities composing the Underlyings would have.

- **YOUR INVESTMENT IS EXPOSED TO A DECLINE IN THE PRICE OR LEVEL, AS APPLICABLE, OF EACH UNDERLYING** — Your return on the securities, if any, is not linked to a basket consisting of the Underlyings.

Rather, any payment on the securities will be determined by reference to the performance of *each* individual Underlying. Unlike an instrument with a return linked to a basket, in which risk is mitigated and diversified among all of the basket components, you will be exposed equally to the risks related to each Underlying and your return will be based on the lesser performing of the Underlyings, as measured on each Observation Date (including the Final Valuation Date). Poor performance by either Underlying over the term of the securities may adversely affect your return on the securities and will not be offset or mitigated by a positive performance by the other Underlying.

- **BECAUSE THE SECURITIES ARE LINKED TO THE LESSER PERFORMING OF THE TWO UNDERLYINGS, YOU ARE EXPOSED TO A GREATER RISK OF LOSING SOME OR ALL OF YOUR INVESTMENT THAN IF THE SECURITIES WERE LINKED TO JUST ONE UNDERLYING** — The risk that you will lose some or all of your investment in the securities is greater than in substantially similar securities that are linked to the performance of just one of the Underlyings. With two Underlyings, it is more likely that the Final Level of at least one Underlying will be less than its Buffer Level than if the securities were linked to only one Underlying, and therefore, it is more likely that you will receive a Payment at Maturity that is less than your investment. In addition, the performance of the Underlyings may not be correlated. If the performance of the Underlyings is not correlated, or is negatively correlated, the potential for the Final Level of at least one Underlying to be less than its Buffer Level is even greater. Although the correlation of the Underlyings' performance may change over the term of the securities, the Buffer Levels are determined, in part, based on the correlation of the Underlyings' performance at the time when the terms of the securities are finalized. A lower Buffer Level for an Underlying is generally associated with a lower correlation of the Underlyings, which reflects a greater potential for loss on your investment at maturity.

- **THE INDEX REFLECTS THE PRICE RETURN OF THE STOCKS COMPOSING THE INDEX, NOT THEIR TOTAL RETURN INCLUDING ALL DIVIDENDS AND OTHER DISTRIBUTIONS** — The Index reflects the changes in the market prices of its component stocks. The Index is not, however, a "total return" index, which, in addition to reflecting those price returns, would also reflect the reinvestment of all dividends and other distributions paid on the stocks composing the Index.

- **THE SPONSOR OF THE INDEX MAY ADJUST THE INDEX IN WAYS THAT AFFECT THE LEVEL OF THE INDEX AND HAS NO OBLIGATION TO CONSIDER YOUR INTERESTS** — The sponsor of the Index (the "**Index Sponsor**") is responsible for calculating and maintaining the Index. The Index Sponsor can add, delete or substitute the components of the Index or make other methodological changes that could change the level of the Index. You should realize that the changing of such Index components may affect the Index, as a newly added component may perform significantly better or worse than the component it replaces. Additionally, the Index Sponsor may alter, discontinue or suspend calculation or dissemination of the Index. Any of these actions could adversely affect the level of the Index and, thus, the value of, and your return on, the securities. The Index Sponsor has no obligation to consider your interests in calculating or revising the Index.

- **THE SECURITIES ARE SUBJECT TO RISKS ASSOCIATED WITH SMALL-CAPITALIZATION COMPANIES** — The stocks composing the Index are issued by companies with relatively small market capitalization. These companies often have greater stock price volatility, lower trading volume and less liquidity than large-capitalization companies and, therefore, the level of the Index may be more volatile than the levels of indices that consist of large-capitalization stocks. Stock prices of small-capitalization companies are also generally more vulnerable than those of large-capitalization companies to adverse business and economic developments, and the

stocks of small-capitalization companies may be thinly traded. In addition, small-capitalization companies are typically less well-established and less stable financially than large-capitalization companies and may depend on a small number of key personnel, making them more vulnerable to loss of personnel. Such small-capitalization companies tend to have lower revenues, less diverse product lines, smaller shares of their product or service markets, fewer financial resources and less competitive strengths than large-capitalization companies and are more susceptible to adverse developments related to their products. These companies may also be more susceptible to adverse developments related to their products or services.

The Policies of the FUND ADVISOR and Changes that Affect the fund or THe Tracked Index Could Adversely Affect the Value of the securities — The policies of the Fund Advisor concerning the calculation of the Fund's net asset value ("**NAV**"), additions, deletions or substitutions of securities or other assets or financial measures held by the Fund, substitution of the Tracked Index and the manner in which changes affecting how the Tracked Index is calculated are reflected in the Fund could adversely affect the price of the shares of the Fund and, therefore, the value of, and your return on, the securities. The value of, and your return on, the securities could also be adversely affected if the Fund Advisor changes these policies, for example, by changing the manner in which it calculates the Fund's NAV, or if the Fund Advisor discontinues or suspends calculation or publication of the Fund's NAV, in which case it may become difficult to determine the value of the securities. If events such as these occur or if the Closing Level of the Fund is not available on any Observation

Date (including the Final Valuation Date) because of a market disruption event or for any other reason, the calculation agent, in certain circumstances, may determine the Closing Level of the Fund and the Payment at Maturity in a manner it considers appropriate in its sole discretion.

- **The Performance of the fund, Particularly During Periods of Market Volatility, May Not Match the Performance of the Tracked Index or ITS NET ASSET VALUE per Share** — The performance of the Fund may not match the performance of the Tracked Index due to a number of factors. For instance, the Fund may not hold all or substantially all of the securities included in the Tracked Index and the Fund Advisor may invest a portion of the Fund's assets in securities not included in the Tracked Index. Therefore, the performance of the Fund is generally linked, in part, to assets other than the securities included in the Tracked Index. Additionally, the performance of the Fund will reflect transaction costs and fees that are not included in the calculation of the Tracked Index.

In addition, because the shares of the Fund are traded on a securities exchange and are subject to supply and demand, the performance of one share of the Fund may differ from the performance of the Tracked Index or the Fund's NAV per share. Furthermore, during periods of market volatility, securities or other assets held by the Fund may become unavailable in the secondary market due to reduced liquidity or suspensions of, or limitations on, trading, making it difficult for market participants to accurately calculate the NAV per share of the Fund and/or create, redeem or hedge shares of the Fund. In such circumstances, the prices at which market participants are willing to buy and sell shares of the Fund may be significantly lower than the Fund's NAV and the liquidity of the shares of the Fund may be materially and adversely affected. Consequently, the performance of the Fund may deviate significantly from the performance of the Tracked Index or the Fund's NAV per share. These circumstances may or may not constitute market disruption events and, in either case, your return on the securities may be determined based on the price of the Fund when it deviates significantly from the performance of the Tracked Index or the Fund's NAV per share. If this occurs, the value of, and your return on, the securities may be materially and adversely affected.

- **ANTI-DILUTION PROTECTION IS LIMITED AND THE CALCULATION AGENT MAY MAKE ADJUSTMENTS IN ADDITION TO, OR THAT DIFFER FROM, THOSE SET FORTH IN THE ACCOMPANYING PRODUCT SUPPLEMENT** — The calculation agent will make adjustments to the Share Adjustment Factor, which will initially be set at 1.0, for certain events affecting the shares of the Fund. The calculation agent is not required, however, to make such adjustments in response to all events that could affect the shares of the Fund. If such an event occurs that does not require the calculation agent to make an adjustment, the value of the securities may be materially and adversely affected. In addition, you should be aware that the calculation agent may, at its sole discretion, make adjustments to the Share Adjustment Factor or any other terms of the securities that are in addition to, or that differ from, those described in the accompanying product supplement to reflect changes occurring in relation to the Fund in circumstances where the calculation agent determines that it is appropriate to reflect those changes to ensure an equitable result. Any alterations to the specified anti-dilution adjustments described in the accompanying product supplement may be materially adverse to investors in the securities. You should read "Description of Securities — Anti-Dilution Adjustments for Funds" in the accompanying product supplement in order to understand the adjustments that may be made to the securities.

- **THE SECURITIES ARE SUBJECT TO CURRENCY EXCHANGE RATE RISK** — Because the Fund invests in stocks denominated in foreign currencies but its shares are denominated in U.S. dollars, changes in currency exchange rates may negatively impact the Fund's return. Of particular importance to currency exchange rate risk are:

- existing and expected rates of inflation;
- existing and expected interest rates;
- political, civil or military unrest;
- the balance of payments between the countries represented in the Fund and the U.S.; and
- the extent of governmental surpluses or deficits in the countries represented in the Fund and the U.S.

All of these factors are in turn sensitive to the monetary, fiscal and trade policies pursued by the governments of the countries represented in the Fund, the U.S. and other countries important to international trade and finance. An investor's net exposure to currency exchange rate risk will depend on the extent to which the currencies represented in the Fund strengthen or weaken against the U.S. dollar and the relative weight of each currency

represented in the Fund. If, taking into account such weighting, the U.S. dollar strengthens against the component currencies as a whole, the price of the Fund will be adversely affected and the value of the securities may be reduced. Additionally, the volatility and/or correlation (including the direction and extent of such correlation) of the exchange rates between the U.S. dollar and the currencies represented in the Fund could adversely affect the value of the securities.

- **THERE ARE RISKS ASSOCIATED WITH INVESTMENTS IN SECURITIES LINKED TO THE VALUES OF EQUITY SECURITIES ISSUED BY NON-U.S. COMPANIES** — The Fund holds component stocks that are issued by companies incorporated outside of the U.S. Because the component stocks also trade outside the U.S., the securities are subject to the risks associated with non-U.S. securities markets. Generally, non-U.S. securities markets may be less liquid and more volatile than U.S. securities markets and market developments may affect non-U.S. securities markets differently than U.S. securities markets, which may adversely affect the price of the Fund and the value of your securities. Furthermore, there are risks associated with investments in securities linked to the values of equity securities issued by non-U.S. companies. There is generally less publicly available information about non-U.S. companies than about those U.S. companies that are subject to the reporting requirements of the SEC, and non-U.S. companies are subject to accounting, auditing and financial reporting standards and requirements that differ from those applicable to U.S. reporting companies. In addition, the prices of equity securities issued by non-U.S. companies may be adversely affected by political, economic, financial and social factors that may be unique to the particular countries in which the non-U.S. companies are incorporated. These factors include the possibility of recent or future changes in a non-U.S. government's economic and fiscal policies (including any direct or indirect intervention to stabilize the economy and/or securities market of the country of such non-U.S. government), the presence, and extent, of cross shareholdings in non-U.S. companies, the possible imposition of, or changes in, currency exchange laws or other non-U.S. laws or restrictions applicable to non-U.S. companies or investments in non-U.S. securities and the possibility of fluctuations in the rate of exchange between currencies. Moreover, certain aspects of a particular non-U.S. economy may differ favorably or unfavorably from the U.S. economy in important respects, such as growth of gross national product, rate of inflation, capital reinvestment, resources and self-sufficiency.

- **THERE IS NO AFFILIATION BETWEEN THE FUND OR THE UNDERLYING STOCK ISSUERS AND US AND WE HAVE NOT PARTICIPATED IN THE PREPARATION OF, OR VERIFIED, ANY INFORMATION ABOUT THE FUND OR THE UNDERLYING STOCK ISSUERS** — We are not affiliated with the Fund or the other issuers of the component stocks held by the Fund or included in the Tracked Index (such stocks, "**Underlying Stocks**," and the issuers of Underlying Stocks, "**Underlying Stock Issuers**"). However, we or our affiliates may currently, or from time to time in the future, engage in business with the Underlying Stock Issuers, including extending loans to, making equity investments in, acting as underwriter in connection with future offerings of the Underlying Stocks by, or providing advisory services (including merger and acquisition advisory services) to, such Underlying Stock Issuers. In the course of this business, we or our affiliates may acquire non-public information about the Underlying Stock Issuers and we will not disclose any such information to you. Nevertheless, neither we nor our affiliates have participated in the preparation of, or verified, any information about the Underlying Stocks or any of the Underlying Stock Issuers. You, as an investor in the securities, should make your own investigation into the Underlying Stocks and the Underlying Stock Issuers. Neither the Fund nor any of the Underlying Stock Issuers is involved in this offering in any way and none of them has any obligation of any sort with respect to your securities. The Fund has no obligation to take your interests into consideration for any reason, including when taking any actions that would require the calculation agent to adjust the Share Adjustment Factor, which may adversely affect the value of your securities.

- **PAST PERFORMANCE OF THE UNDERLYINGS IS NO GUIDE TO FUTURE PERFORMANCE** — The actual performance of the Underlyings over the term of the securities may bear little relation to the historical closing prices or levels, as applicable, of the Underlyings and/or the hypothetical examples set forth elsewhere in this pricing supplement. We cannot predict the future performance of the Underlyings or whether the performance of the Underlyings will result in the return of any of your investment.

- **ASSUMING NO CHANGES IN MARKET CONDITIONS AND OTHER RELEVANT FACTORS, THE PRICE YOU MAY RECEIVE FOR YOUR SECURITIES IN SECONDARY MARKET TRANSACTIONS WOULD GENERALLY BE LOWER THAN BOTH THE ISSUE PRICE AND THE ISSUER'S ESTIMATED VALUE OF THE SECURITIES ON THE TRADE DATE** — While the payment(s) on the securities described in this pricing supplement is based on the full Face Amount of securities, the Issuer's estimated value of the securities on the Trade Date (as disclosed on the cover of this pricing supplement) is less than the Issue Price of the securities. The Issuer's estimated value of the securities on the Trade Date does not represent the price at which we or any of our affiliates would be willing to purchase your securities in the secondary market at any time. Assuming no changes in market conditions or our creditworthiness and other relevant factors, the price, if any, at which we or our affiliates would be willing to purchase the securities from you in secondary market transactions, if at all, would

generally be lower than both the Issue Price and the Issuer's estimated value of the securities on the Trade Date. Our purchase price, if any, in secondary market transactions would be based on the estimated value of the securities determined by reference to (i) the then-prevailing internal funding rate (adjusted by a spread) or another appropriate measure of our cost of funds and (ii) our pricing models at that time, less a bid spread determined after taking into account the size of the repurchase, the nature of the assets underlying the securities and then-prevailing market conditions. The price we report to financial reporting services and to distributors of our securities for use on customer account statements would generally be determined on the same basis. However, during the period of approximately three months beginning from the Trade Date, we or our affiliates may, in our sole discretion, increase the purchase price determined as described above by an amount equal to the declining differential between the Issue Price and the Issuer's estimated value of the securities on the Trade Date, prorated over such period on a straight-line basis, for transactions that are individually and in the aggregate of the expected size for ordinary secondary market repurchases.

In addition to the factors discussed above, the value of the securities and our purchase price in secondary market transactions after the Trade Date, if any, will vary based on many economic and market factors, including our creditworthiness, and cannot be predicted with accuracy. These changes may adversely affect the value of your securities, including the price you may receive in any secondary market transactions. Any sale prior to the Maturity Date could result in a substantial loss to you. The securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your securities to maturity.

- **THE SECURITIES WILL NOT BE LISTED AND THERE WILL LIKELY BE LIMITED LIQUIDITY** — The securities will not be listed on any securities exchange. There may be little or no secondary market for the securities. We or our affiliates intend to act as market makers for the securities but are not required to do so and may cease such market making activities at any time. Even if there is a secondary market, it may not provide enough liquidity to allow you to sell the securities when you wish to do so or at a price advantageous to you. Because we do not expect other dealers to make a secondary market for the securities, the price at which you may be able to sell your securities is likely to depend on the price, if any, at which we or our affiliates are willing to buy the securities. If, at any time, we or our affiliates do not act as market makers, it is likely that there would be little or no secondary market in the securities. If you have to sell your securities prior to maturity, you may not be able to do so or you may have to sell them at a substantial loss, even in cases where the prices or levels, as applicable, of the Underlyings have increased since the Trade Date.

- **MANY ECONOMIC AND MARKET FACTORS WILL AFFECT THE VALUE OF THE SECURITIES** — While we expect that, generally, the prices or levels, as applicable, of the Underlyings will affect the value of the securities more than any other single factor, the value of the securities prior to maturity will also be affected by a number of other factors that may either offset or magnify each other, including:

  - the expected volatility of the Underlyings;
  - the time remaining to the maturity of the securities;
  - the market prices and dividend rates of the shares of the Fund and the securities composing the Underlyings;

- the composition of the Underlyings;
- the occurrence of certain events affecting the Fund that may or may not require an anti-dilution adjustment;
- the exchange rates between the U.S. dollar and the non-U.S. currencies that the stocks held by the Fund are traded in;
- interest rates and yields in the markets generally;
- geopolitical conditions and economic, financial, political, regulatory or judicial events that affect either Underlying, the Tracked Index or the markets generally;
- supply and demand for the securities; and
- our creditworthiness, including actual or anticipated downgrades in our credit ratings.

During the term of the securities, it is possible that their value may decline significantly due to the factors described above even if the prices or levels, as applicable, of the Underlyings remain unchanged from their

respective Initial Levels, and any sale prior to the Maturity Date could result in a substantial loss to you. You must hold the securities to maturity to receive the stated payout from the Issuer.

- **TRADING AND OTHER TRANSACTIONS BY US OR OUR AFFILIATES IN THE EQUITY AND EQUITY DERIVATIVE MARKETS MAY IMPAIR THE VALUE OF THE SECURITIES** — We or our affiliates expect to hedge our exposure from the securities by entering into equity and equity derivative transactions, such as over-the-counter options, futures or exchange-traded instruments. We or our affiliates may also engage in trading in instruments linked or related to the Underlyings on a regular basis as part of our or their general broker-dealer and other businesses, for proprietary accounts, for other accounts under management or to facilitate transactions for customers, including block transactions. Such trading and hedging activities may adversely affect the prices or levels, as applicable, of one or both Underlyings and, therefore, make it less likely that you will receive a positive return on your investment in the securities. It is possible that we or our affiliates could receive substantial returns from these hedging and trading activities while the value of the securities declines. We or our affiliates may also issue or underwrite other securities or financial or derivative instruments with returns linked or related to the Underlyings. To the extent that we or our affiliates serve as issuer, agent or underwriter for such securities or financial or derivative instruments, our or our affiliates' interests with respect to such products may be adverse to those of the holders of the securities. Introducing competing products into the marketplace in this manner could adversely affect the prices or levels, as applicable, of one or both Underlyings and the value of the securities. Any of the foregoing activities described in this paragraph may reflect trading strategies that differ from, or are in direct opposition to, investors' trading and investment strategies related to the securities. Furthermore, because Deutsche Bank Securities Inc. ("**DBSI**") or one of its affiliates is expected to conduct trading and hedging activities for us in connection with the securities, DBSI or such affiliate may profit in connection with such trading and hedging activities and such profit, if any, will be in addition to any compensation that DBSI receives for the sale of the securities to you. You should be aware that the potential to earn a profit in connection with hedging activities may create a further incentive for DBSI to sell the securities to you in addition to any compensation they would receive for the sale of the securities.

- **WE OR OUR AFFILIATES MAY PUBLISH RESEARCH, EXPRESS OPINIONS OR PROVIDE RECOMMENDATIONS THAT ARE INCONSISTENT WITH INVESTING IN OR HOLDING THE SECURITIES. ANY SUCH RESEARCH, OPINIONS OR RECOMMENDATIONS COULD ADVERSELY AFFECT THE PRICES OR LEVELS, AS APPLICABLE, OF THE UNDERLYINGS AND THE VALUE OF THE SECURITIES** — We or our affiliates may publish research from time to time on financial markets and other matters that could adversely affect the prices or levels, as applicable, of the Underlyings and the value of the securities, or express opinions or provide recommendations that are inconsistent with purchasing or holding the securities. Any research, opinions or recommendations expressed by us or our affiliates may not be consistent with each other and may be modified from time to time without notice. You should make your own independent investigation of the merits of investing in the securities and the Underlyings.

- **POTENTIAL CONFLICTS OF INTEREST** — We and our affiliates play a variety of roles in connection with the issuance of the securities, including acting as calculation agent, hedging our obligations under the securities and determining the Issuer's estimated value of the securities on the Trade Date and the price, if any, at which we or our affiliates would be willing to purchase the securities from you in secondary market transactions. In performing these roles, our economic interests and those of our affiliates are potentially adverse to your interests as an investor in the securities. The calculation agent will determine, among other things, all values, prices and levels required to be determined for the purposes of the securities on any relevant date or time. The calculation agent also has some

discretion about certain adjustments to the Share Adjustment Factor and will be responsible for determining whether a market disruption event has occurred as well as, in some circumstances, the prices or levels related to the Underlyings that affect whether the securities are automatically called. Any determination by the calculation agent could adversely affect the return on the securities.

THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE SECURITIES ARE UNCERTAIN — There is no direct legal authority regarding the proper U.S. federal income tax treatment of the securities, and we do not plan to request a ruling from the IRS. Consequently, significant aspects of the tax treatment of the securities are uncertain, and the IRS or a court might not agree with the treatment of the securities as prepaid financial contracts that are not debt. If the IRS were successful in asserting an alternative treatment for the securities, the tax consequences of ownership and disposition of the securities could be materially and adversely affected. In addition, as described above under "Tax Consequences," in 2007 the U.S. Treasury Department and the IRS released a notice requesting comments on various issues regarding the U.S. federal income tax treatment of "prepaid forward contracts" and similar instruments. Any Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the securities, possibly with retroactive effect. You should review carefully the section of the accompanying product supplement entitled "U.S. Federal Income Tax Consequences," and consult

your tax adviser regarding the U.S. federal tax consequences of an investment in the securities (including possible alternative treatments and the issues presented by the 2007 notice), as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

Historical Information

The following graphs set forth the historical performances of the iShares® MSCI EAFE ETF and the Russell 2000® Index based on their daily closing prices or levels, as applicable, from January 3, 2013 through January 3, 2018. The closing price of the iShares® MSCI EAFE ETF on January 3, 2018 was $71.17. The closing level of the Russell 2000® Index on January 3, 2018 was 1,552.576. Each graph below also indicates by a broken line the Buffer Level equal to 80.00% of the closing price or level, as applicable, of the relevant Underlying on January 3, 2018. We obtained the historical closing prices and levels of the Underlyings below from Bloomberg L.P. and we have not participated in the preparation of, or verified, such information. **The historical closing prices and levels of the Underlyings should not be taken as an indication of future performance and no assurance can be given as to the closing prices or levels, as applicable, of the Underlyings on any of the Observation Dates (including the Final Valuation Date). We cannot give you assurance that the performance of the Underlyings will result in the return of any of your investment**.

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Correlation of the Underlyings

The following graph sets forth the historical performances of the iShares® MSCI EAFE ETF and the Russell 2000® Index from January 3, 2013 through January 3, 2017, based on the daily closing prices or levels, as applicable, of the Underlyings. For comparison purposes, each Underlying has been normalized to have a closing level of 100.00 on January 3, 2013 by (1) dividing the closing price or level, as applicable, of that Underlying on each day by the closing price or level, as applicable, of that Underlying on January 3, 2013 and (2) multiplying by 100.00.

We obtained the closing prices and levels used to determine the normalized closing prices and levels set forth below from Bloomberg, without verification. Historical performance of the Underlyings should not be taken as an indication of future performance. Future performance of the Underlyings may differ significantly from historical performance and no assurance can be given as to the closing prices or levels, as applicable, of the Underlyings on any of the Observation Dates (including the Final Valuation Date). We cannot give you assurance that the performances of the Underlyings will result in the return of any of your investment.

The closer the relationship of the daily returns of a pair of Underlyings over a given period, the more positively correlated those Underlyings are. The graph above illustrates the historical performance of each Underlying relative to the other Underlying over the time period shown and provides an indication of how close the relative performance of the daily returns of one Underlying has historically been to the other. For additional information, please see “Key Risks — Because The Securities Are Linked To The Lesser Performing Of The Two Underlyings, You Are Exposed To A Greater Risk Of Losing Some Or All Of Your Investment Than If The Securities Were Linked To Just One Underlying” in this pricing supplement. The lower (or more negative) the correlation between two Underlyings, the less likely it is that those Underlyings will move in the same direction and, therefore, the greater the potential that the Final Level of at least one of the Underlyings may be less than its Buffer Level. This is because the less positively correlated a pair of Underlyings are, the greater the likelihood that the level of at least one of the Underlyings will decrease. This results in a greater potential for a loss of some or all of your investment at maturity. However, even if two Underlyings have a higher positive correlation, the Final Level of one or both of those Underlyings may be less than its Buffer Level as the levels of both of those Underlyings may decrease together.

Deutsche Bank AG determined the Digital/Call Returns for the securities based, in part, on the correlation among the Underlyings, calculated using internal models at the time the terms of the securities were set. As discussed above, increased risk resulting from lower correlation is reflected in higher Digital/Call Returns than would be payable on securities linked to underlyings that have a higher degree of correlation.

Supplemental Plan of Distribution (Conflicts of Interest)

DBSI, acting as agent for Deutsche Bank AG, will not receive a selling concession in connection with the sale of the securities. DBSI will pay custodian fees to other broker dealers of 0.05% or $0.50 per $1,000 Face Amount of securities. Deutsche Bank AG will reimburse DBSI for such custodial fees.

DBSI, the agent for this offering, is our affiliate. Because DBSI is both our affiliate and a member of the Financial Industry Regulatory Authority, Inc. ("**FINRA**"), the underwriting arrangement for this offering must comply with the requirements of FINRA Rule 5121 regarding a FINRA member firm's distribution of the securities of an affiliate and related conflicts of interest. In accordance with FINRA Rule 5121, DBSI may not make sales in offerings of the securities to any of its discretionary accounts without the prior written approval of the customer. See "Plan of Distribution (Conflicts of Interest)" in the accompanying product supplement.

Settlement

We expect to deliver the securities against payment for the securities on the Settlement Date indicated above, which is expected to be a day that is greater than two business days following the Trade Date. Under Rule 15c6–1 of the Securities Exchange Act of 1934, as amended, trades in the secondary market generally are required to settle in two business days, unless the parties to a trade expressly agree otherwise. Accordingly, if the Settlement Date is more than two business days after the Trade Date, purchasers who wish to transact in the securities more than two business days prior to the Settlement Date will be required to specify alternative settlement arrangements to prevent a failed settlement.

Validity of the Securities

In the opinion of Davis Polk & Wardwell LLP, as special United States products counsel to the Issuer, when the securities offered by this pricing supplement have been executed and issued by the Issuer and authenticated by the authenticating agent, acting on behalf of the trustee pursuant to the Indenture, and delivered against payment as contemplated herein, such securities will be valid and binding obligations of the Issuer, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith) and possible judicial or regulatory actions giving effect to governmental actions or foreign laws affecting creditors' rights, provided that such counsel expresses no opinion as to the effect of fraudulent conveyance, fraudulent transfer or similar provision of applicable law on the conclusions expressed above. This opinion is given as of the date hereof and is limited to the laws of the State of New York. Insofar as this opinion involves matters governed by German law, Davis Polk & Wardwell LLP has relied, without independent investigation, on the opinion of Group Legal Services of Deutsche Bank AG, dated as of January 1, 2016,

filed as an exhibit to the opinion of Davis Polk & Wardwell LLP, and this opinion is subject to the same assumptions, qualifications and limitations with respect to such matters as are contained in such opinion of Group Legal Services of Deutsche Bank AG. In addition, this opinion is subject to customary assumptions about the trustee's authorization, execution and delivery of the Indenture and the authentication of the securities by the authenticating agent and the validity, binding nature and enforceability of the Indenture with respect to the trustee, all as stated in the opinion of Davis Polk & Wardwell LLP dated as of January 1, 2016, which has been filed by the Issuer on Form 6–K dated January 4, 2016.