

NANOVIRICIDES, INC.  
Form 10-K/A  
October 08, 2013

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C . 20549**

FORM 10-K/A

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE  
SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED JUNE 30, 2013

**NANOVIRICIDES, INC.**

(Name of Business Issuer in Its Charter)

NEVADA 76-0674577  
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

135 WOOD STREET, SUITE 205, WEST HAVEN, CONNECTICUT 06516

(Address of principal executive offices)

203-937-6137

(Issuer's telephone number, including area code)

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT: NONE

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:

COMMON STOCK, PAR VALUE \$0.001 PER SHARE NYSE MKT

(Title of Class)

(Name of exchange on which registered)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

Indicate by a check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by checkmark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§229.405 of this chapter) during the preceding 12 months ( or for such shorter period that the registrant was required to submit and post such files.

Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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", or "smaller reporting company" in Rule 12b-2 of the Exchange Act (check one):

Large accelerated filer  Accelerated filer

Non-accelerated filer  Smaller reporting Company

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes  No

As of September 30, 2013, there were 50,007,400 shares of common stock of the registrant issued and outstanding.

The aggregate market value of the voting stock held on December 31, 2012 by non-affiliates of the registrant was \$53,072,557 based on the closing price of \$0.47 per share, pre-split, as reported on the OTC Bulletin Board on December 31, 2012, the last business day of the registrant's most recently completed fiscal second quarter (calculated by excluding all shares held by executive officers, directors and holders known to the registrant of five percent or more of the voting power of the registrant's common stock, without conceding that such persons are "affiliates" of the registrant for purposes of the federal securities laws).

***Explanatory Note:*** The primary purpose of this Amendment to the Annual Report on Form 10-K for the fiscal year ended June 30, 2013 for NanoViricides, Inc. (the “Registrant”), filed with the Securities and Exchange Commission on September 30, 2013 (the “Form 10-K”), is to provide the consolidated financial statements and related notes from the Form 10-K formatted in XBRL (eXtensible Business Reporting Language) and to furnish Exhibit 101 to the Form 10-K in accordance with Rule 405 of Regulation S-T. Exhibit 101 to this report provides the consolidated financial statements and related notes from the Form 10-K formatted in XBRL.

In addition, the Registrant corrected one reference in the Balance Sheet to the number of authorized shares of the Registrant’s authorized common stock prior to the Registrant’s reverse split on a 1 for 3.5 basis. The revision did not affect any of the financial statements or the notes thereto.

Pursuant to Rule 406T of Regulation S-T, the interactive data files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities Act of 1934, as amended, and otherwise are not subject to liability under those sections.

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## **PART I**

### **SPECIAL NOTE ON FORWARD-LOOKING STATEMENTS**

The information in this report contains forward-looking statements. All statements other than statements of historical fact made in this report are forward looking. In particular, the statements herein regarding industry prospects and future results of operations or financial position are forward-looking statements. These forward-looking statements can be identified by the use of words such as “believes,” “estimates,” “could,” “possibly,” “probably,” “anticipates,” “projects,” “expects,” “may,” “will,” or “should,” “designed to,” “designed for,” or other variations or similar words. No assurances can be given that the future results anticipated by the forward-looking statements will be achieved. Forward-looking statements reflect management’s current expectations and are inherently uncertain. Our actual results may differ significantly from management’s expectations.

Although these forward-looking statements reflect the good faith judgment of our management, such statements can only be based upon facts and factors currently known to us. Forward-looking statements are inherently subject to risks and uncertainties, many of which are beyond our control. As a result, our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below under the caption “Risk Factors.” For these statements, we claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995. You should not unduly rely on these forward-looking statements, which speak only as of the date on which they were made. They give our expectations regarding the future but are not guarantees. We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.

## **ITEM I: BUSINESS**

### **Organization and Nature of Business**

#### **The 2012-2013 Financial Year in Review**

NanoViricides, Inc. is a leading company in the application of nanomedicine technologies to the complex issues of viral diseases. The nanoviricide® technology enables direct attacks at multiple points on a virus particle. It is believed that such attacks would lead to the virus particle becoming ineffective at infecting cells. Antibodies in contrast attack a virus particle at only a maximum of two attachment points per antibody.

Our anti-viral therapeutics, that we call “nanoviricides®” are designed to look to the virus like the native host cell surface to which it binds. Since these binding sites for a given virus do not change despite mutations and other changes in the virus, we believe that our drugs will be broad-spectrum, i.e. effective against most if not all strains, types, or subtypes, of a given virus, provided the virus-binding portion of the nanoviricide is engineered appropriately.

Of note for the financial year ending June 30, 2013, is that the Company has made significant progress in advancing our pipeline, as well as improving our corporate governance and executive capabilities. As a result of these improvements in corporate governance and our technological achievements, as well as additional steps we took, we are happy to report that NanoViricides, Inc. common stock was uplisted on September 25, 2013, subsequent to this annual report. NanoViricides common stock began trading under the same symbol, “NNVC”, on the New York Stock Exchange MKT marketplace on that date. This is a very important milestone for our Company. NanoViricides, Inc. is possibly the first company in the world in the entire field of nanomedicines to have developed a nanomedicine drug that is effective when taken orally (by mouth). Our oral anti-influenza drug candidate, NV-INF-2, has shown extremely high broad-spectrum effectiveness against two different influenza A viruses in animal models, in our FluCide™ program. We are also developing a highly effective injectable anti-influenza drug, NV-INF-1, in this program. The Company is developing this injectable drug (NV-INF-1) for hospitalized patients with severe influenza, including immuno-compromised patients. The Company believes that this drug may also be usable as a single-dose injection in a medical office for less severe cases of influenza. Both of these anti-influenza therapeutic candidates are “broad-spectrum”, i.e. they are expected to be effective against most if not all types of influenzas including the recently discovered novel strain of H7N9, Bird Flu H5N1, other Highly Pathogenic Influenzas (HPI/HPAI), Epidemic Influenzas such as the 2009 “swine flu” H1N1/A/2009, and Seasonal Influenzas including the recent H3N2 influenza. The Company has already demonstrated that our anti-influenza drugs have significantly superior activity when compared to oseltamivir (Tamiflu®) against two unrelated influenza A subtypes, namely, H1N1 and H3N2 in a highly lethal animal model.

Both of these anti-influenza drug candidates can be used as prophylactics to protect at-risk personnel such as health-care workers and immediate family members and caretakers of a patient.

The Company is also developing an anti-HIV drug. The drug candidates in this HIVCide™ program were found to have effectiveness equal to that of a triple drug HAART cocktail therapy in the standard humanized SCID-hu Thy/Liv mouse model. Moreover, the nanoviricides were long acting. Viral load suppression continued to hold for more than four weeks after stopping HIVCide treatment. The Company believes that this strong effect and sustained effect together indicate that HIVCide can be developed as a single agent that would provide “Functional Cure” from HIV/AIDS. The Company believes that substantially all HIV virus can be cleared upon HIVCide treatment, except the integrated viral genome in latent cells. This would enable discontinuation of treatment until HIV reemerges from the latent reservoir, which may be several months without any drugs. Moreover, the Company believes that this therapy would also minimize the chances of HIV transmission. The Company is currently optimizing the anti-HIV drug candidates. These drug candidates are effective against both the R5 and X4 subtypes of HIV-1 in cell cultures. The Company believes that these drug candidates are “broad-spectrum”, i.e. they are expected to be effective against most strains and mutants of HIV, and therefore escape of mutants from our drugs is expected to be minimal.

In addition, the Company is developing broad-spectrum eye drops which it expects to be effective against a majority of the viral infections of the external eye. Most of these viral infections are from adenoviruses or from herpesviruses. The Company has shown excellent efficacy of its drug candidates against EKC (adenoviral epidemic kerato-conjunctivitis) in an animal model. In addition, the anti-HSV drug candidates have shown excellent efficacy in cell culture studies.

The Company is also developing a skin cream formulation for the treatment of herpes cold sores or genital warts.

Further, the Company is developing a broad-spectrum drug against Dengue viruses that is expected to be useful for the treatment of any of the four major serotypes of dengue viruses, including in severe cases of dengue (DSS) and dengue hemorrhagic fever (DHF). DSS and DHF are thought to be caused by prior antibodies against dengue that a patient’s body creates to fight a second unrelated dengue infection, and the second virus uses these antibodies effectively to hitch a ride into human cells, thereby causing a more severe infection than in naive patients. The Company recently received an “Orphan Drug Designation” for our Denguecide™ drug. An application for orphan drug designation is also pending with the European Medicines Agency (EMA). This orphan drug designation carries significant economic benefits for the Company.

In addition to these six drugs in development, the Company also has research programs against Rabies virus, Ebola and Marburg viruses, the recently emerged Middle East Respiratory Syndrome coronavirus (MERS-CoV), and others. To date, the Company does not have any commercialized products. The Company continues to add to our existing portfolio of products through our internal discovery and clinical development programs and also seeks to do so through an in-licensing strategy.

With the achievement of extremely high levels of effectiveness in appropriate animal models for its current drug candidates listed above, the Company has progressed to advance its drugs into the clinical stage.

In March 2012, we held a pre-IND meeting with the United States Food & Drug Administration (“FDA”) for our anti-influenza drug candidate, NV-INF-1. We obtained valuable advice from the US FDA regarding the requirements for filing an Investigational New Drug (“IND”) for this anti-influenza drug candidate.

The drugs are required to be manufactured in cGMP-compliant manner (cGMP = “current Good Manufacturing Practices”) for use in human clinical trials. The Company is steadily progressing on enabling cGMP manufacturing capability for all of its nanoviricides® drug candidates. The Company reported in April 2013 that the engineering design of its cGMP manufacturing plus laboratory facility is substantially complete. The facility is now in construction phase.

In addition, the process of making the materials has to be optimized and appropriate analytical and quality control methods must be developed. This is a part of CMC (“Chemistry, Manufacture and Controls”) activities required before filing an Investigational New Drug application (IND) to allow human clinical studies. The Company is progressing steadily in satisfying the CMC requirements for its Injectable and Oral anti-Influenza drug candidates at present.

Because of the high level of safety observed in our animal studies, our Safety and Toxicology studies (“Tox Package” studies) have been estimated to require relatively large quantities of materials. This has necessitated that the Company enable scaled-up production and qualify the production processes at a much larger scale than what is needed for small animal studies. Tox Package does not require cGMP materials. Therefore, we have engaged in this scale up at our existing facilities rather than waiting for the cGMP facilities to be completed. We have completed the initial studies to verify that the scaled up production of our Injectable and Oral anti-Influenza drug candidates can be performed successfully.

In August, 2012, we announced that we were successful in developing an anti-influenza drug candidate that was orally effective. We believe this may be the very first targeted nanomedicine that is available via the oral route. Oral availability of FluCide would open up a much larger market than the injectable version. The Company intends to continue to develop the injectable version for hospitalized patients. For severe, hospitalized cases of influenza, we are developing a concentrated solution that is administered by “piggy-back” incorporation into the standard IV fluid supplement system that is commonly used in hospitalized patients. In addition, we now plan to develop an oral version for out-patients and later also for pediatric patient populations. This oral version will replace the injectable drug that we were developing for out-patients.

In September 2012, we announced that the oral version of FluCide was also highly effective against a different sub-type of influenza A, namely H3N2, in addition to the influenza strain of H1N1 that we had been using for development, in the same lethal animal challenge model. This is an important indication that our drug candidates against influenza are indeed broad-spectrum, i.e. capable of combating most if not all influenza viruses.

In April 2013, we announced, that our two anti-Influenza drug candidates are also expected to be effective against the novel H7N9 strain of Influenza A that has killed 35 people in China this year. Our expectation is based on the analysis of publicly available characteristics of the H7N9 virus.

We will need to perform animal studies against a few additional strains of influenza viruses in order to substantiate that these drugs are indeed broad-spectrum drug candidates. Additional studies in cell cultures against different strains of influenza are also planned. All of these studies are necessary for filing an IND application.

In June 2013, we submitted an application to the US FDA to designate our anti-dengue drug candidate as an “orphan drug” under the Orphan Drug Act. Subsequently we also submitted a similar orphan drug designation application at the European Medical Agency for this same drug. Dengue, a viral disease, is considered an orphan disease in United States as well as Europe. We retained Coté Orphan Consulting (COC), headed by Dr. Tim Coté, to help us with these submissions. In 2013 we were awarded Orphan Drug Status by the USFDA.

The Nanoviricides® technology is receiving substantial attention and recognition in the scientific world. Dr. Anil R. Diwan, President and Chairman of the Company, was invited to Chair the Section on “Designing Nanomedicines” at the First Annual Symposium on Nanomedicines: Charting a Roadmap to Commercialization, held by the Nanomedicines Alliance on March 6-7, 2013 at the Hilton Washington DC/Rockville, Maryland, USA. Also, Dr. Randall W. Barton, Chief Scientific Officer of the Company, was invited to co-Chair the Section on “Pre-Clinical Pharmacology” at the same event. NanoViricides, Inc. is a member of the Nanomedicines Alliance. Later that month, Dr. Diwan was invited to present a seminar at the University of California, Los Angeles. This seminar was hosted by the Center for Biological Physics, jointly with the California NanoSystems Institute on March 22, 2013.

In addition to technological progress for moving our drugs into the Clinic, we also strive to improve our Corporate Governance and Executive capabilities towards the goal of building a highly successful pharmaceutical company.

To this end, we announced that on May 13, 2013, Ms. Meeta R. Vyas, a seasoned executive, has joined the Company as Interim Chief Financial Officer. Ms. Vyas is a successful former CEO of a public company with significant experience advising senior executives in strategy and operations.

We also bolstered our Board of Directors. As reported previously, we have appointed Mr. Stanley Glick, an experienced CPA, as an Independent Director and the Chairman of our Audit Committee on June 22, 2012. We are happy to report that we have added two more independent directors to the board, making the board independent of the executives.

Milton Boniuk, MD, the Caroline F. Elles Chair Professor of Ophthalmology in the Alkek Eye Center at the Baylor College of Medicine, joined our Board on May 28, 2013, as an independent member of the Company's Board of Directors.

Mukund S. Kulkarni, Professor of Finance and Chancellor of Penn State University, Harrisburg, joined our Board on June 24, 2013, as an independent member of the Company's Board of Directors.

As a result of these appointments, we now have three independent members on our Board of Directors.

Ms. Vyas is known as a strong leader with board level experience and successful achievements as a Senior Executive in a broad range of entities including publicly listed corporations, non-revenue generating entities, and medium to large size companies. Meeta has over twenty-five years of experience in performance and process improvement of both publicly listed companies and non-revenue producing entities, in areas ranging from Finance and Operations to Strategy and Management. Meeta holds the distinction of being the first Indian woman to be named CEO of a publicly listed US corporation, Signature Brands, Inc., best known for “Mr. Coffee” and “Health-O-Meter” brand products. As CEO, acting COO and Vice Chairman of the Board of Signature Brands, Inc., she was responsible for the development and implementation of a turnaround plan, resulting in a return to profitability and growth within a short period of time. Later, as the CEO of the World-Wide Fund for Nature - India (WWF-India) and then as a Vice President of the National Audubon Society (USA), both non-revenue generating entities, Meeta successfully raised unrestricted funding that significantly exceeded annual requirements and also instituted financial processes to measure a variety of performance metrics. Earlier in her career, she was responsible for designing the strategy and initiating the implementation plan for the highly successful information technology outsourcing program at General Electric (GE). Also at GE, Ms. Vyas ran GE Appliances’ Range Products business unit having revenues exceeding \$1 Billion where her team doubled operating income in less than two years. Prior to that, as a management consultant with McKinsey and Company, she served publicly listed companies in chemicals, industrial, and technology markets, primarily focusing on growth strategies, valuations, post-merger integrations, and logistics operations. Meeta is married to NanoViricides, Inc. President and Chairman Anil R. Diwan. Ms. Vyas holds a MBA in Finance from Columbia University’s Graduate School of Business, and a SB in Chemical Engineering from the Massachusetts Institute of Technology.

Mr. Stanley Glick, CPA, has over forty years of experience in his long career of providing auditing, accounting, tax, and management advisory services, to clients in various industries. Mr. Glick has been a member of several Boards of Directors for not-for-profit organizations in the Westport, CT area. In particular, he has served as a Director and member of Audit Committee of “A Better Chance” of Westport, CT, from 2000 to 2005. From 1977 until present, Mr. Glick has managed an independent practice as a Certified Public Accountant in Connecticut and New York States. Prior to forming his own CPA firm, Mr. Glick was employed by local and regional CPA firms where he performed and supervised audits and financial reporting. Mr. Glick is a member of the American Institute of Certified Public Accountants, The Connecticut Society of Certified Public Accountants, and the New York State Society of Certified Public Accountants. He holds a Bachelor of Business Administration degree in Accounting from Baruch College of Business (now Baruch College of the City University of New York). Mr. Glick is married and lives in Trumbull, CT.

Dr. Boniuk is an astute and highly successful businessman and entrepreneur, in addition to being an accomplished eye surgeon, educator, and administrator. He conducts a busy clinical practice in orbital surgery, eyelid reconstruction, ocular oncology and comprehensive ophthalmology. Additionally, he plays a major role in Baylor’s resident and fellow medical doctor education programs. Dr. Boniuk has made significant contributions in cataract surgery, glaucoma, corneal dystrophies, retinal diseases and surgery. He is a nationally and internationally recognized expert in the pathology and surgical management of orbital and intra-ocular tumors. His description of the ocular pathology of the congenital rubella syndrome in 1967 was a landmark publication. Of note, Dr. Boniuk has made substantial medical contributions in areas that are of great significance to the Company, such as ocular adenoviral infections, that cause epidemic kerato-conjunctivitis (EKC). The Company has developed a drug candidate for EKC infection that was successfully tested in rabbits. These animals serve as a surrogate for the viral disease in human eyes. Dr. Boniuk is also well known for his philanthropic endeavors. He and his wife Laurie founded the National Society for Parent and Child Development in 1989. In 1994, he established the Lions Eye Bank Foundation’s Milton Boniuk, M.D.,

Endowment Fund to support resident research in the Ophthalmology Department at Baylor. In 2004, Milton and Laurie Boniuk contributed \$5 million to Rice University to establish the Boniuk Center for the Study and Advancement of Religious Tolerance. In 2013, they gave an additional \$28.5M to Rice University to upgrade this Center to The Boniuk Institute for the Study and Advancement of Religious Tolerance. The Boniuk Institute will conduct research, public outreach and educational programming. Its mission is to foster multidisciplinary research that leads to innovative ways to understand and achieve religious tolerance. Dr. Boniuk earned his MD at the Dalhousie University, Halifax, Nova Scotia, Canada, followed by an internship at the Victoria General Hospital, Halifax, Nova Scotia, Canada, and Residency at the Center for Ophthalmology, Jefferson Medical College - Wills Eye Hospital, Philadelphia, PA. In addition, he served a Fellowship in Ophthalmic Pathology at the world-renowned Armed Forces Institute of Pathology, Washington, DC. Dr. Boniuk has been a long term investor and strong supporter of NanoViricides, Inc.

Dr. Mukund S. Kulkarni became the chancellor of Penn State Harrisburg in 2010. Dr. Kulkarni continues to hold his academic appointment of Professor of Finance, in addition to his administrative position as the Chancellor. An accomplished teacher and scholar, Kulkarni is widely published in academic journals and has presented papers at several scholarly conferences. His research interests are in the areas of capital budgeting, capital structure, and information content of stock prices. Dr. Mukund Kulkarni joined Penn State Harrisburg in 1985 as a faculty member in the School of Business Administration. During his many years there, he held several administrative positions. Prior to becoming chancellor, he was senior associate dean for academic affairs from 2006-2010. In 1996, he became the director of the School of Business Administration, a position he held for a period of ten years. During Dr. Kulkarni's tenure, Penn State Harrisburg has experienced substantial growth in its student population. In support of enrollment growth, he has overseen successful introduction of new degree programs, expanded international outreach efforts, enhanced teaching and learning support to faculty, and developed and executed plans to upgrade instructional technology and classroom facilities. He has drawn an ambitious plan for facilities improvement in support of student growth. Dr. Kulkarni is an invited lecturer and consultant to several academic institutions in the U.S. and abroad, in addition to state government and nonprofit organizations. He has valuable corporate experience in the commercial banking industry particularly in the area of resource and deployment planning, branch expansion planning, and bank profitability assessment. Dr. Kulkarni is widely engaged in social and civic activities in and around Harrisburg region. He is member of several boards of civic and nonprofit organizations including Harrisburg Regional Chamber of Commerce, United Way of the Capital Region, Modern Transit Partnership, and Asian Indian Americans of Central Pennsylvania, among others. Dr. Kulkarni earned his bachelor's and master's degrees in his native India, an M.B.A. from Marshall University, and a Doctorate in economics with a concentration in finance from the University of Kentucky.

As a result of the improvements in Corporate Governance and Executive Team, we became eligible for listing on major US national stock exchanges, except for the stock price criteria. We performed a uniform reverse split of our securities, at a 3.5 to 1 ratio, thus exchanging 3.5 shares of pre-split stock and replacing them with 1 share of the post-split stock, to attain full eligibility for up-listing, on September 10, 2013. As a result of the uniform reverse split, all of our outstanding pre-split warrants were also exchanged automatically for post-split warrants with numbers reduced by a factor of 3.5 and strike price increased by a factor of 3.5, to achieve the same effect in terms of the number of shares in the transaction. Thus, for example, 3.5 pre-split warrants that had a strike price of \$1 to purchase the pre-split stock (i.e. a total of \$3.5 would convert 3.5 of these pre-split warrants into 3.5 shares of pre-split stock), would be automatically exchanged into 1 post-split warrant with a strike price of \$3.5 to purchase 1 post-split share. Concomitantly, we also performed a registered direct financing of approximately \$10.33 million, with net proceeds to the Company of approximately \$9.6 million, after deducting expenses and fees. On September 22, upon receiving final approval for listing from the NYSE MKT, we announced that the Company's (post-split) shares will begin trading on the New York Stock Exchange MKT beginning on September 25, 2013, under the same stock symbol, namely "NNVC". On September 25, 2013, after opening of market, we announced that the Company's (post-split) shares have begun trading on the New York Stock Exchange MKT under the same symbol "NNVC".

We have previously announced certain important issuances of patents on the TheraCour® technology underlying our nanoviricides® drugs. Most importantly, a fundamental patent on the polymeric micelles composition, structure and uses was issued in the USA with substantially broad claims. This validates the novelty of our approach as well as our leadership position in the nanomedicines based on polymeric micelle technologies. All of the patent applications have been filed internationally. To date more than 20 patent grants have occurred and additional grants continue as the applications progress through review.

These events have been the result of continuing progress and development work that the Company has been performing through several years. We had undertaken the challenge of developing an orally available anti-influenza drug nearly three years ago. The chemistry work was already completed by June, 2012 and the first animal testing results became available in August, 2012.

We are also working on developing cGMP (current Good Manufacturing Practices) manufacturing capabilities for making clinical drug substance batches of our drugs. A group of private financiers that includes our founder Dr. Anil Diwan has acquired an 18,000 sq. ft. building on 4 acres with possibilities of expansion, in Shelton, CT, via Inno-Haven, LLC, a company formed specifically for that purpose in August 2011. Inno-Haven has since borrowed substantial amounts of additional funds to finance this total renovation project. The project had several changes of scope, accounting for the delays in design phase.

This versatile, customizable facility is designed to support the production of kilogram-scale quantities of any of our nanoviricides drugs. In addition, it is designed to support the production of the drug in any formulation such as injectable, oral, skin cream, eye drops, lotions, etc. The scale is designed so that clinical batches for Phase I, Phase II, and Phase III can be made in this facility. The clean room suite contains areas suitable for the production of sterile injectable drug formulations, which require special considerations.

We have a strong team engaged on the total renovation project for building cGMP facility and associated R&D laboratories in the Shelton campus. Mr. Andrew Hahn, retired Director of Facilities (Global) for Bristol-Myers-Squibb is our lead designer and overall steward for this project. Mr. Phil Mader, previously the Senior Capital Project Manager at Bristol-Myers Squibb Company in Wallingford, CT (“BMS”), is our Project Manager. Mr. Mader’s firm, MPH Engineering is engaged for engineering design. In addition, Ms. Kathy Cowles, founder of ID3A Architects serves as the lead architect. A highly optimized floor plan has been developed by our architectural, design and engineering teams. Design and Engineering also has been completed. This project is now in construction phase. If there are no delays or long back-orders on certain pieces of equipment, we anticipate that this total renovation of the premises will be completed in the first calendar quarter of 2013.

Our timelines depend upon several assumptions, many of which are outside the control of the Company, and thus are subject to delays.

After the renovation is completed, we will need to obtain occupancy certificate, move the existing facilities to the new place, as well as install additional equipment. We will need to validate, test and verify that all the systems are functioning as needed for being able to make cGMP drug substance batches. Then we will need to run several batches, analyze the resulting products, and establish that our manufacturing processes are performing satisfactorily to produce the desired drug substance. A minimum of two reproducible batches are required to be made before submitting an Investigational New Drug application (IND) to the US FDA. In addition, we will also need to seek and obtain US FDA registration as a cGMP facility.

We also need to perform certain safety and toxicology studies as well as additional in vitro and in vivo efficacy characterization of our drug candidates in preparation for an IND application. We believe that we will be taking injectable FluCide™ as our first IND to the US FDA and to other worldwide regulatory agencies.

The Company will be able to make “cGMP-like” material in the new facility once the facility is validated. A “cGMP-like” drug substance can be loosely defined as drug substance made using the same processes as c-GMP material but prior to undergoing the FDA registration process for the cGMP facility. Such c-GMP-like product can be used for clinical batches for human clinical studies in several countries around the world. The Company is currently investigating all such options in order to expedite the timeline to entering human clinical trials. The Company intends to contract out clinical batch fulfillments to outside contract manufacturers.

In order to minimize capital costs, NanoViricides, Inc. intends to lease the completed facilities from Inno-Haven, LLC. A memorandum of understanding (MOU) to that effect was signed as of February 11, 2013, and requires a lease agreement to be signed at a later date, when the construction costs are fully known. The MOU is subject to a definitive lease agreement (the “Lease Agreement”) to be executed upon final determination of the costs of the project. The terms of the lease have not been finalized.

We have been aggressively expanding our portfolio of virus targets and drug candidates every year since our inception in May 2005. We began with drug candidates against Influenza. We then shortly added a drug candidate against Rabies, one of the most difficult diseases to tackle. We started working on Ebola/Marburg viruses (filoviruses) and developed drug candidates worthy of further drug development. Shortly thereafter, we developed a drug candidate against Adenoviral Epidemic Kerato-conjunctivitis (EKC). In 2008, we added anti-HIV drug candidates to our growing portfolio. In 2009, we improved upon our EKC drug candidates to develop new drug candidates that may be effective potentially against most known viral diseases of the external eye. Most of these viral diseases are caused by a wide variety of adenoviruses and herpes simplex viruses. We also developed new drug candidates against the herpes viruses (HSV-1 and HSV-2), for the treatment of recurrent HSV skin infections, such as cold sores and genital warts in 2008-2009. In 2010, we added drug candidates effective against Dengue viruses to our pipeline. In 2011, we began focusing on activities needed for taking our anti-influenza drug into human clinical trials. In 2012, we developed an oral version of our anti-influenza drug candidate in the Flucide program. Thus, in just about seven years we have developed a very broad pipeline of drug candidates. We believe that we will have clinically relevant drug candidates in many, if not all, of these disease areas.

We have continued to further advance the nanoviricide drug candidates against the six commercially important indications in our pipeline successfully this year.

We have completed our second anti-HIV in vivo study in the HIVCide program in August 2011, at KARD Scientific. This study was conducted using the standard humanized mouse model. In this model, the immune system of the mouse is replaced by human immune system. Then HIV infection is given. HIV infects the human immune system. The antivirals are then given and tested for their effect on the interaction of HIV with the implanted human immune system. In the previous anti-HIV study, we had found that three different unoptimized anti-HIV nanoviricides exhibited extremely strong effectiveness that was equal to or better than a three drug HAART cocktail (highly effective antiretroviral treatment) in this animal model. We have since developed better optimized ligands to attack the HIV virus particle. In order to find the best ligand, we reduced the amount of ligand attached to the polymer chain in this new study. We were able to select the best nanoviricide anti-HIV ligand in the new study, which appears to be

better than all the ligands tested in the previous study. This nanoviricide's effect was still equal to or better than the same 3-drug HAART cocktail, although we had expected a substantially reduced effect.

What is more, the new anti-HIV nanoviricide drug candidate continued to maintain HIV-1 viral load suppression for at least 28 days after last drug dosing in this recent study. So we believe that an intermittent therapy against HIV/AIDS is feasible with nanoviricides. We believe that such a therapy would allow patients to achieve nominally HIV-free status, and have a normal life, for long periods, without drugs. We are now further optimizing the HIVCide drug candidates. In effect, we believe that HIVCide would enable a "functional cure" for HIV, although much work needs to be done as this program matures into a clinical candidate.

Subsequently, we have conducted a cell culture-based study of a set of anti-HIV drug candidates designed using information from this study as well as molecular modeling against known HIV-1 gp120 –human CD4 binding site structures to identify better anti-HIV ligands. This study was performed at Southern Research Institute in Frederick, MD. The Company reported in September 2013 that it has identified an improved broad-spectrum anti-HIV ligand in this study, based on the previous best ligand from the 2011 study. Also, both of these broad-spectrum ligands, when connected to a different backbone polymer than in the 2011 study, have shown substantially improved inhibition of two different types of HIV-1 virus in a standard cell culture study of virus neutralization and inhibition. HIV-1 Ba-L, a CCR5-using strain as well as HIV-1 IIB, a CXCR4-using strain, were both inhibited equally well by these two different nanoviricide drug candidates in the standard MAGI HIV Antiviral Assay. The present cell culture data also showed that the two nanoviricides under study were safe to cells at far greater levels than the level needed for therapeutic effects.

The Company has designed these anti-HIV ligands using reported gp120 protein structures of several HIV-1 strains in order to achieve broad-spectrum effectiveness. The HIV-1 gp120 protein binds to the human cell surface receptors CD4 and CCR5 or CXCR4 thereby enabling entry of the virus into the cell. The MAGI-R5 cells used in this study express CD4 and both CXCR4 and CCR5 co-receptors. Different HIV-1 strains are known to use CD4 as a required receptor and, additionally, at least one of the CCR5 or CXCR4 (or both) as a co-receptor. The CCR5+ HIV strains generally transmit from human to human, whereas in the patient's body, over time, the CXCR4+ HIV strains dominate. Thus it is important to develop a drug that is effective against both of these types of HIV-1 viruses.

The Company believes that its strategy of mimicking the CD4 binding to HIV-1 should allow the development of broad-spectrum anti-HIV drugs. The site on CD4 at which HIV-1 binds remains the same in spite of the large number of mutations that the HIV virus undergoes. The Company's nanoviricide® technology enables creation of a nanomicelle that looks like the surface of the human cell to the virus, attracting the virus to bind and thereupon neutralizing the virus.

Nanoviricide technology is built on the TheraCour® polymeric micelle platform technology. The design of these materials is like building blocks. We can select components to achieve desired effects. This tailor-made customizability has many implications. It allows us to (1) rapidly create a new drug against a different virus; (2) rapidly develop a drug with desired length of time for which its effect should persist; and (3) quickly develop new drugs with different routes of administration; among many other benefits.

We had always suspected that the polymeric nature of nanoviricides would enable a long drug effectiveness time frame, thus enabling infrequent dosing. We have indications now that this is very likely true from both FluCide™ and HIVCide™ programs. We have observed sustained antiviral effects for a long time after last drug administration in various animal model studies.

Infrequent dosing would translate into ease of patient compliance. Patient compliance is a major issue for all antiviral drug therapies, and particularly for HIV/AIDS.

We have been able to develop drugs using many different routes of administration with very little development time and effort.

Initially, we focused on developing only injectable formulations since these afford the maximum bioavailability of the drug inside the body. We have also developed eye drop solutions against EKC in a very short time frame.

A skin cream appears to be the right formulation for the treatment of oral and genital warts caused by HSV-1 and HSV-2. Last year we had already observed that our drug candidates, in the solution form, were effective in cell cultures against at least two different strains of HSV-1 in two different laboratories. We needed to make skin creams for conducting animal studies and selected different building blocks for our backbone polymer, and built new drugs against HSV. Subsequently, we have also developed the anti-HSV drug candidates in the form of skin lotions.

The skin cream drug candidates against HSV were developed within a matter of weeks. Similarly, development of the skin lotion form of the HSV candidates also took only a few weeks. In both cases, the formulation development itself

took only a few days. In contrast, many drug development companies spend years in formulations development.

We have successfully developed what may be the first ever orally available targeted nanomedicine, in our Flucide program.

We have thus demonstrated that we can rapidly develop different formulations because of the inherent strength of the nanoviricide platform technology. The technology also enables us to develop nasal sprays and bronchial aerosols. We plan to develop the appropriate formulations as necessary.

We have limited our expenditures on socially conscious projects such as “Neglected Tropical Diseases” (NTD’s), and “Bio-defense” projects to the extent that participatory funding from third parties is available. To this end, we attempt to obtain grants and contracts financing from government and non-government sources. We will continue to work on these programs as time and resources permit. In addition, we continue to develop novel technologies such as ADIF™ (“Accurate-Drug-In-Field™”), which may possibly represent one of the best scientific approaches against manmade and natural novel disease agents. Outbreaks of natural novel viral diseases, such as MERS-CoV (Middle East Respiratory Coronavirus infection, a deadly disease that is seen in the middle east and European areas at present), SARS, Influenza, Ebola/Marburg and other presently unknown diseases will continue to occur. A novel SARS virus called h-CoV-EMC aka MERS-CoV has emerged very recently in the Middle East. This virus does not share the same receptor as the previous 2002-2003 outbreak SARS virus (now called SARS-CoV). At present, there is no feasible therapeutic intervention for outbreaks of novel viruses, such as these new coronavirus outbreaks.

We continued to raise financing successfully. Seaside 88, LP (“Seaside”) invested an aggregate of \$25M thus far and we raised an additional \$6M from family offices and a charitable foundation in February, 2013. This larger than anticipated raise enabled us to repay Seaside and complete the Seaside transaction in February, 2013.

With these transactions, we had cash in hand of approximately \$13.9M as of June 30, 2013, and additional cash-like assets of approximately \$1.5M in the form of prepaid expenses and security deposits. We spent approximately \$7.5M in cash during this year. Thus we had approximately two years’ worth of cash in hand at the end of the reporting period. In addition, in order to conserve cash expenditures, we also pay compensation in stock and stock instruments to various parties. The stockholder’s equity stood at approximately \$8M as of June 30, 2013.

Subsequent to this financial year, we completed a registered direct offering of our common stock that raised approximately \$10.3M on September, 10, 2013, with approximately \$9.6M net proceeds after deducting expenses and fees. Midtown Capital Partners, LLC, and Chardan Capital, LLC served as joint brokers on this raise and were paid a total of 6% in cash and 2% in warrants as the fees. Each broker received 50% of the total fees.

With this raise, as of September 30, 2013, we have estimated cash in hand of approximately \$23.5M. This cash reserve enables us to move our drug candidates forward in the US Food and Drug Administration (“FDA”) and International regulatory approval processes.

We now have six commercially significant active drug development programs: (1) Oral FluCide™, against all Influenzas, (2) A Piggy-back (injectable or infusible) version of Flucide for hospitalized patients, (3) nanoviricide eye drops against adenoviral EKC and herpes keratitis, (4) HIVCide™-I against HIV/AIDS, (5) HerpeCide™-I skin cream formulation for herpes cold sores and genital warts, and (6) DengueCide™, a broad spectrum nanoviricide designed to attack all types of dengue viruses and expected to be effective in the Severe Dengue Disease syndromes including Dengue Hemorrhagic Fever (DHS) and Dengue Shock Syndrome (DSS). We continue to achieve very strong performance in the testing of these drug candidates.

In our extensive animal studies we have observed that our drug materials were well tolerated in mice, humanized mice, and rabbits, and did not produce any adverse events. These studies involved different viral targets, different nanoviricides, with different ligands attached, and differing polymeric micelle backbones, indicating that our technology and design of nanoviricides appears to be resulting in substantially safe drug substances. We believe that the TheraCour® polymer chemistry inherently endows safety by its design to the nanoviricides drug candidates. The polymer backbone comprises PEG (polyethylene glycol), which is known to minimize antigenicity of the drugs that it is attached to. PEG is extensively employed in drug design, especially for biologics, to minimize immune reactions caused by the native antibodies or proteins as drugs. Particularly well known in this regard is the “PEGylation” technology. We believe that the other parts of the nanoviricide’s polymer backbone are readily metabolizable, and much of it serves as “food” to cells. It is of course possible that toxicity can occur due to a specific ligand. We believe that we have made an effort at designing relatively safe anti-viral ligands. In addition, because our nanoviricides target the virus particle and not the host systems, we believe that our nanoviricide approach itself has inherent safety advantages over traditional antiviral drugs that must penetrate cells, accumulate inside and thereby may result in toxicities by interfering with, or being subject to, cellular processes.

We have continued to achieve significant milestones in our drug development activities. All of our drug development programs are presently at pre-clinical stage. We continue to test several drug candidates under each program even though we may achieve extremely strong results with some of the candidates.

Our strategy is to minimize capital expenditure. We therefore rely on third party collaborations for the testing of our drug candidates. We continue to engage with our previous collaborators. In addition, we have engaged Biologics

Consulting Group, Inc., to help us with the FDA regulatory submissions. We are also engaged with Australian Biologics Pty, Ltd to help us with clinical trials and regulatory approvals in Australia. We believe that cGMP-like manufactured product is acceptable for entering human clinical trials in Australia.

The Company reports summaries of its studies as the data becomes available to the Company, after analyzing and verifying same, in its press releases.

After declaring the injectable FluCide drug candidate in February 2012, we have been focused on taking our technology from the small scale syntheses needed for small animal studies to the large scale syntheses for making large batches of our nanoviricides as would be needed for Safety and Toxicology (“Tox Package” studies) and later for human clinical trials. Because of the significant safety observed during the several animal studies designed to test the effectiveness of FluCide drug candidates in small animals, the scale required for the tox package studies was estimated at kilograms. Originally we had intended to perform kg-scale syntheses only after the new lab and facilities designed for such scale up was available. However, the facility program was significantly behind due to challenges related to resources availability as well as significant challenges posed by the need for designing complex functionality in a limited space while performing renovation of an existing space. We therefore decided to perform the synthesis of FluCide for tox package in our existing small-scale laboratory. We have been optimizing the processes and translating laboratory operations to appropriate chemical process unit operations in the subsequent time frame. This is a very significant undertaking, given the constraints of our current small-scale facility. After we have completed these process optimizations, we will still need to produce at least three to five batches of the injectable FluCide, analyze the product for comparability, and combine these batches to produce a master batch sufficient to perform the tox package studies with. These activities are currently in progress.

While we have made significant progress in this scale up program at our current facility, certain key equipment pieces that we need are still on back order at present with certain vendors. After these equipment pieces arrive, we will need to set them up, validate them and then use them for the operations they are intended for. This continues to be an item causing delays in our goal of making sufficient quantities of FluCide for the tox package study and it is outside of the Company's control.

During the last year, we have also been focused on the design of the cGMP clinical batch production facility and associated R&D laboratories to be commissioned in the Shelton campus.

In addition, we have also focused on improving our Executive Team and Corporate Governance. This initiative has successfully resulted in up-listing of our common stock to the New York Stock Exchange MKT (NYSE MKT) on September 25, 2013, under the same symbol, namely NNVC, as described earlier.

In July-August 2011, we reported on the anti-HIV studies in animals that were designed to discriminate the comparative effectiveness of different ligands. We reported that our lead anti-HIV candidate achieved anti-HIV efficacy equivalent to a HAART (highly active anti-retroviral therapy) triple drug cocktail in this recently completed animal study. Treatment with this lead anti-HIV nanoviricide reduced HIV levels and protected the human T cells (CD4+/CD8+) to the same extent as treatment with the HAART cocktail. The three drug HAART cocktail used for comparison in this study is one of the combination therapies recommended for initial therapy in humans. No evidence of drug toxicity was observed in the case of nanoviricide drug candidates. We later reported that this lead anti-HIV drug candidate achieved a long term anti-HIV effect with a much shorter dosing regimen and a markedly lower total drug dose than the HAART drug cocktail therapy in a recent animal study. The antiviral effect of the anti-HIV nanoviricide ("HIVCide™") continued throughout the 48 days of study even though HIVCide dosing was discontinued after only 20 days. The clinical benefit of HIVCide was found to be sustained for at least four weeks after the last drug dose. Treatment with the lead anti-HIV nanoviricide both (1) reduced the HIV viral load and (2) also protected the human T cells (CD4+, CD8+, as well as double-positive CD4+CD8+), equally well as compared to treatment with the three-drug HAART cocktail, at 24-days as well as at 48-days, even though the HIVCide treatment was stopped at 20 days. The lead candidate is now undergoing further optimization.

A long and sustained effect of HIVCide would lead to improved patient compliance, which is a sought after goal in HIV therapy. With this new study, we believe that we are close to a "Functional Cure" of HIV wherein the patient can take treatment until the viral load is undetectable and then stop treatment until an episode of virus reawakening occurs.

In September 2013, the Company reported that it has successfully improved upon its previous lead anti-HIV drug candidate, based on cell culture studies. An improved broad-spectrum anti-HIV nanoviricide that inhibited two distinctly different types of HIV-1 viruses equally well has been identified. This drug candidate also exhibited a very large therapeutic index. The Company had previously reported that it is optimizing the anti-HIV drug candidate. These cell culture studies were conducted by Southern Research Institute, Frederick, MD. The Company reported that

it has identified an improved broad-spectrum anti-HIV ligand, based on the previous best ligand from the 2011 study (see above). Also, both of these broad-spectrum ligands, namely (a) the best one from this 2013 cell culture study and (b) the previous best from the 2011 animal study, when connected to a different backbone polymer than in the 2011 study, demonstrated substantially improved inhibition of two different types of HIV-1 virus in a standard cell culture study of virus neutralization and inhibition. The HIV-1 Ba-L, a CCR5-using strain, as well as the HIV-1 IIB, a CXCR4-using strain, were both inhibited equally well by these two different nanoviricide drug candidates in the standard MAGI HIV Antiviral Assay. The MAGI-R5 cells used in the current study express CD4 and both CXCR4 and CCR5 co-receptors. Different HIV-1 strains are known to use CD4 as a required receptor and, additionally, at least one of the CCR5 or CXCR4 (or both) as a co-receptor. The CCR5+ HIV strains generally transmit from human to human, whereas in the patient's body, over time, the CXCR4+ HIV strains dominate. Thus it is important to develop a drug that is effective against both of these types of HIV-1 viruses.

The present cell culture data also showed that the two nanoviricides under study were safe to cells at far greater levels than the level needed for therapeutic effects.

The Company has designed these anti-HIV ligands using reported gp120 protein structures of several HIV-1 strains in order to achieve broad-spectrum effectiveness. The HIV-1 gp120 protein binds to the human cell surface receptors CD4 and CCR5 or CXCR4 thereby enabling entry of the virus into the cell.

The Company believes that its strategy of mimicking the CD4 binding to HIV-1 should allow the development of broad-spectrum anti-HIV drugs. The site on CD4 at which HIV-1 binds remains the same in spite of the large number of mutations that the HIV virus undergoes. The Company's nanoviricide® technology enables creation of a nanomicelle that looks like the surface of the human cell to the virus, attracting the virus to bind and thereupon neutralizing the virus.

Our nanoviricide® technology is based on two separate parts that are chemically connected together to make the nanoviricide drug candidate: (a) a linear polymer made from a monomer of PEG connected to a linker containing fatty acid chains, and (b) virus-binding ligands attached to the connector of this polymer. We design the ligands as mimics of the cell surface receptor(s) to which the virus particle binds, using molecular modeling and other techniques. In the nanoviricide, we believe that the polymer backbone forms a globular micelle with the fatty acid chains floating in the interior of the micelle, thereby resembling a structure similar to the cell surface. When appropriate ligands are attached to the polymer, the resulting polymer would “look like” a cell surface with a very high density of virus binding points. We believe that this would cause the virus to bind to the nanoviricide in preference over binding to host cells, and the virus would “enter” into the nanoviricide micelle, and possibly uncoat itself thinking that it has entered a cell. The nanoviricide is thus designed to act like a “Venus fly-trap” for the virus. To make such a sophisticated nanomachine work, it requires a significant degree of optimization. The tailorable, building-block based design of the TheraCour® polymeric micelle technology on which our nanoviricide® technology is based enables such optimization.

We design several ligands and then attach them to a single polymer backbone and test them in cell culture and animal studies to obtain the best possible ligand. We look to optimize the potency while retaining broad-spectrum effectiveness when we test for the ligands. We optimize the polymer backbone separately. By choosing various building blocks appropriately, and by choosing appropriate chemical processes, it is possible to design polymer backbones that (a) provide the appropriate length of time of residence in the body; (b) provide a formulation optimal for a specific route of administration such as injectable, skin cream, skin lotion, ophthalmic lotion, and even oral as we have been able to do in the case of FluCide™ (see below); (c) provide an optimal density of ligands to maximize the ability to attract the virus, bind to it, and potentially dismantle the vulnerable viruses.

In the case of FluCide™, we have completed these optimization studies resulting in two separate FluCide drugs, namely the injectable FluCide, and the oral FluCide. The injectable FluCide is further advanced in its development cycle and is anticipated to be our first drug candidate going towards and IND filing and human clinical studies in the near future as we complete its pre-clinical development and c-GMP manufacturing process development. The oral FluCide is anticipated to follow the injectable FluCide.

In the case of HIVCide™ we are close to completing the ligand optimization and are also in the process of further optimizing the polymer backbone. We have already identified certain polymeric backbone chemistries that appear to provide extended viral load suppression for as long as 30 days or more even after stopping the drug, in animal studies. Given the chronic nature of HIV/AIDS, such a drug that has long sustained effect is expected to provide significant benefits to the patient. We believe once a week dosing is possible. Anti-HIV drug development is both expensive and slow because of the nature of the animal studies that require SCID mice whose immune system is destroyed and then replaced by surgically implanting and growing human immune system tissues in the mouse body. Due to our limited resources, HIVCide development is further hampered. Nevertheless we have continued to make progress in the HIVCide program. We are also working on developing total cure of HIV/AIDS. In addition to minimizing the viral load to achieve a “Functional Cure” with the HIVCide, a total cure would require development of a drug that hones in onto infected cells, and seeks to destroy only the HIV infected cells that harbor the HIV genome inside it. We believe we have excellent technologies for such site-directed, specific approaches. This program is in R&D stage and we expect that it will take some time before a drug candidate with the potential of totally curing HIV/AIDS can be identified.

In September 2011, we announced that we have selected a clinical candidate, now designated NV-INF-1, for FDA submission in our highly successful FluCide™ anti-influenza therapeutics program. The Company is now developing certain additional information on NV-INF-1, and is progressing this drug candidate towards an IND for use with hospitalized patients with influenza.

In July 2011, we retained the Biologics Consulting Group to help us with our regulatory filings. This led to our pre-IND meeting request to the US FDA in December, 2011, and a pre-IND meeting with the US FDA in March, 2012. In July 2012, we retained Australian Biologics Pty. Ltd., a regulatory affairs consulting firm, to coordinate the regulatory review and approval to conduct the first human trials in Australia for Flucide™, the Company's broad-spectrum anti-influenza drug. Australian Biologics will also facilitate clinical trial site(s) selection and development of the clinical trials agreements. Dr. Jim Ackland, the Manager of Australian Biologics Pty, Ltd, has extensive experience in this field. Prior to becoming managing director of this company, he was Vice-President, West Coast and Asia Pacific operations for the Biologics Consulting Group, the Company's US FDA regulatory affairs consulting group. In the 1990's, he was the Head of Regulatory Affairs, Vaccines, for the CSL Group in Australia. The CSL Group is a global, specialty biopharmaceutical company that researches, develops, manufactures and markets products to treat and prevent serious human medical conditions.

In August 2012, we reported that oral effectiveness of anti-influenza FluCide drug was demonstrated in a lethal animal model. Certain anti-influenza drug candidates under our FluCide™ program, when given orally, were nearly as effective as when administered as IV injections. Two different anti-influenza drug candidates were tested in Oral vs. IV comparison, and both of them showed similar results that indicated strong oral effectiveness. The results clearly demonstrated that oral administration of both of these FluCide drug candidates resulted in substantially superior animal protection compared to oseltamivir (Tamiflu®), a standard of care for influenza at present. The studies involved the same highly lethal animal model the Company has continued to use for its influenza drug development program.

One of the FluCide drug candidates, when administered orally, enabled the animals to survive as long as  $347.4 \pm 4.6$  hrs. (14.5 days), and when given as an injectable, it allowed the animals to combat the lethal influenza infection for  $376.8 \pm 7.5$  hrs. (15.7 days). Another drug candidate (with a different anti-viral ligand), when given orally, resulted in the animals surviving for as long as  $301.3 \pm 5.2$  hrs. (12.6 days), and when given as a tail-vein injection, for  $349.0 \pm 3.9$  hrs. (14.5 days). For comparison, untreated control animals died in  $119.5 \pm 1$  hrs. (5 days), and oseltamivir (Tamiflu®) treated animals died within just  $181.7 \pm 4.6$  hrs. (7.6 days).

The survival data clearly showed that oral as well as IV administration of FluCide drug candidates was substantially superior to oseltamivir. In addition, they showed that FluCide drug candidates when given orally had substantial efficacy, almost matching the effectiveness of the injectable form given at 0.3X of the oral dosage level.

One of the FluCide drug candidates, when administered orally, resulted in 1.30 log reduction (or 20X reduction) in lung viral load and matched the viral load reduction on the same drug candidate given as an IV injection. Another drug candidate resulted in 1.23 log viral load reduction when given orally and 1.31 log viral load reduction when given as an injectable. In contrast, oseltamivir (Tamiflu®, given orally at 40mg/kg/d) resulted in only 0.6 log viral load reduction (or only 4X reduction) compared to negative controls. These were the results of lung viral load measured at 108 hours post-infection (hpi). Further, at 180 hpi, the lung viral load remained controlled at about the same level as at 108 hpi with the nanoviricide® drug candidates. In contrast, lung viral load in the oseltamivir treated mice increased to the same level as the negative control (infected untreated) animals prior to their death and the oseltamivir group exhibited a survival of only  $182 \pm 4$  hours.

The number of lung plaques and plaque areas (resulting from the influenza virus infection) also were consistent with the data from the lung viral load, and were minimal in the case of the nanoviricide drug candidates whether given as IV or orally. Oseltamivir treatment did not protect the lungs of infected animals anywhere close to the protection afforded by the FluCide drug candidates.

These data clearly demonstrated that both oral and IV treatment with nanoviricide drug candidates protected the lungs of the mice infected with influenza virus equally well. It is also clear that this lung protection was the result of the substantial decrease in the lung viral load. In addition, they show that FluCide drug candidates when given orally had substantial efficacy, almost matching the effectiveness of the injectable form given at 0.3X of the oral dosage level.

In addition to the antiviral effects, the oral FluCide drug candidates also led to generation of a strong antiviral antibody response. Two different anti-influenza drug candidates were tested in Oral vs. IV comparison. One of the FluCide drug candidates, when administered orally, resulted in  $1866 \pm 90$  micro-g/ml-plasma of anti-influenza antibody, and  $1258 \pm 59$  when administered as IV injections. Another FluCide candidate, when given orally, resulted in  $1491 \pm 37$  ug/ml plasma of anti-influenza antibody, and  $1151 \pm 53$  when administered as IV injections. The untreated infected animals had  $190 \pm 22$  ug/ml antibody response, which was the weakest of all, as expected. Of significance, oseltamivir (Tamiflu) resulted in only  $950 \pm 64$  ug/ml level of antibody response, which was far less than the two oral

FluCide groups (p-value <0.0003), and also substantially less than the two IV FluCide groups (p-value <0.04). These p-values were determined for a comparison of FluCide groups against the oseltamivir group using the most stringent parameters, viz. two-tailed, paired, t-test. A smaller p-value indicates a greater confidence that the difference in observations cannot be a result of pure chance. These data also indicated that the antibody response was stronger when FluCide was given orally rather than as IV injection.

The generation of a strong antibody response is important. We believe that the strong reduction in viral load caused by FluCide treatment allows the immune system to function normally and generate appropriate antibodies. A strong antibody response implies that the FluCide drug candidates may also be useful as prophylactic therapy of uninfected health care workers and close associates of a patient in addition to treatment of infected patients.

All of these data also clearly demonstrated that both injectable and oral FluCide™ candidates were significantly superior to oral oseltamivir (Tamiflu®, Roche), a current standard of care for influenza, in all parameters evaluated.

No adverse effects were found, indicating that the FluCide dose could be increased further to achieve much greater levels of effectiveness.

The oral FluCide candidate development was the result of chemistry optimization program that the Company has been working on.

In September 2012, we announced that the oral FluCide™ drug candidates demonstrated dramatically improved survival in animals administered a lethal dose of the H3N2 influenza A virus. Animals treated with the oral anti-influenza nanoviricide drug candidates survived for much longer as compared to Tamiflu® treated animals.

In this H3N2 infection study, Animals treated with the best of the oral FluCide™ nanoviricide drug candidates survived 15.6 days while the animals treated with oral Tamiflu survived only 9.6 days. The control animals died within 5 days. The Company has previously reported that animals treated with these same oral anti-influenza nanoviricides protected mice infected with the H1N1 influenza A virus and were similarly substantially superior to oral oseltamivir (Tamiflu).

This is the first demonstration of efficacy of the Company's FluCide drug candidates against a completely unrelated type of influenza A virus (viz. H3N2) in contrast to the H1N1 Influenza A virus that the Company has used for its recent development work leading to its pre-IND application with the US FDA. H3N2 influenza virus is one of the multiple sub-types of influenza A that cause seasonal epidemics. According to the CDC, influenza causes approximately 36,000 deaths every year in the U.S. alone. The Hong Kong Flu pandemic of 1968-1969, which killed an estimated one million people worldwide, was caused by a variant strain of H3N2. The Company believes an orally administered nanoviricide that protects against multiple influenza virus sub-types would be effective in season after season of influenza epidemics. Such a highly effective, broad-spectrum anti-influenza drug is widely anticipated to be highly successful.

The Company believes that the anti-influenza drug candidates it has developed are broad-spectrum, i.e. they should work against most if not all of influenza viruses. This is because, in spite of mutations and antigenic drift, all influenza viruses bind to the same cell surface receptor called sialic acid, and the Company has developed small chemical ligands that mimic this receptor, to attack the influenza viruses. These ligands are chemically attached to the Company's polymeric micelle backbones that mimic the cell membrane, to create the nanoviricides. The Company has previously shown effectiveness of its very early anti-influenza drug candidates against two different strains of H5N1 Bird Flu virus in cell culture studies. The Company has since then improved the ligands as well as the chemistries as reported from time to time.

The Company intends to develop data about effectiveness of its drug candidates against certain unrelated influenza A viruses using both cell culture studies and animal models in a reasonable manner. These data will be needed as part of the IND application that the Company is working on. An IND application will be required for the Company to enter into human clinical trials.

Previously, in June 2010, the Company reported successful studies in two different cell culture models of dengue virus type 2 infection. These studies were conducted at the Prof. Eva Harris lab at the UC Berkeley. Our results were later confirmed and extended to animal studies.

The Company reported that its anti-Dengue drug candidates demonstrated significant protection in the initial animal survival studies of Dengue virus infection, in an animal study protocol modeled to simulate the ADE syndrome. The best nanoviricide drug candidates demonstrated 50% animal survival in this uniformly lethal mouse model. The studies were performed in the laboratory of Dr. Eva Harris, Professor of Infectious Diseases at the University of California, Berkeley (UC Berkeley).

Based on this data, the Company believes that it is feasible to develop a single nanoviricide drug against all types of dengue viruses that circumvents the primary issue of antibody-dependent enhancement (ADE) of dengue virus infection. ADE is thought to result in severe dengue disease syndromes such as dengue shock syndrome (DSS) and dengue hemorrhagic fever (DHF).

In June 2010, we also reported that our anti-HIV drug candidates demonstrated efficacy in the recently completed cell culture studies using two distinctly different HIV-1 isolates. These studies were performed in the laboratory of Carol Lackman-Smith at the Southern Research Institute, Frederick, Maryland. These results corroborated our previous findings in Animal Studies. The Company had reported that its best nanoviricide drug candidate against HIV was more than 25 times superior to a three drug combo anti-HIV cocktail based on biomarker test response in all parameters tested. The parameters included improvement in human T cell populations in the animal model and reduction in HIV viral load. The Company has since performed additional studies to optimize the HIV binding ligand and has found ligands that are superior to the one that yielded these strong results. In September 2013, we announced successful anti-HIV drug development studies performed in this same laboratory. Anti-HIV studies are extremely expensive. As such, the Company's HIVCide program has been slowed down.

In August 2010, we reported that our anti-HSV drug candidates exhibited almost complete inhibition of herpes simplex virus HSV-1 in cell culture studies conducted in Professor Ken Rosenthal lab at the Northeastern Ohio Universities Colleges of Medicine and Pharmacy (NEOMED). These studies employed the H129 strain of herpes simplex virus type 1 (HSV-1). H129 is an encephalitic strain that closely resembles a clinical isolate; it is known to be more virulent than classic HSV-1 laboratory strains.

In November 2010, the Company reported that its FluCide™ drug candidates demonstrated dramatically improved survival in animals administered a lethal dose of influenza virus. Animals treated with all of the different influenza nanoviricide drug candidates survived for dramatically longer periods as compared to Tamiflu® treated animals. Animals treated with the best of the optimized FluCide nanoviricide drug candidates survived greater than twice as long (18.1 days) as opposed to the animals treated with Tamiflu (only 7.8 days). In a previous study, the Company had reported that animals treated with the then best anti-influenza nanoviricides survived for as long as 13.9 days in the same animal model. These drug candidates also resulted in a dramatic reduction in viral load within the lungs of animals infected with a lethal dose of H1N1 influenza virus. The most effective FluCide candidate demonstrated a fifteen-fold (15X) greater viral load reduction as compared to Tamiflu, and a thirty-fold (30X) greater viral load reduction as compared to untreated animals. Tamiflu demonstrated a viral load reduction of only twofold (2X) compared to the untreated animals in this high infection, lethality study. We then engaged in chemistry optimization studies to help us with the FDA regulatory requirements.

In March through May 2011, the Company reported that further chemistry optimization led to dramatically improved antiviral efficacy with its optimized FluCide™ drug candidates in its most recent animal study. In the influenza mouse lethal infection model, animals treated with one of the optimized FluCide™ nanoviricide drug candidates survived beyond the stated full duration of study (21 days), and those treated with two additional drug candidates survived almost the full duration of the study. Animals in these three groups survived significantly longer (20.2 to 22.2 days) as compared to the animals treated with Oseltamivir (Tamiflu®) only 8.3 days. In addition, the post-infection treatment with these optimized FluCide™ drug candidates resulted in dramatic reduction in the number of lung lesions that are caused by a lethal influenza virus infection. Four days post virus infection, animals treated with three of the optimized FluCide™ nanoviricide drug candidates exhibited greater than 95% reduction in the number of lung lesions as compared to the infected yet untreated control animals (p-values < 0.001). In contrast, animals treated with Oseltamivir (Tamiflu®, Roche) showed only a 50% reduction. In another significant finding, no increase in the number or size of the lung lesions was observed over the entire duration of the study in the FluCide™-treated animals. This was not the case for the Oseltamivir-treated animals. This demonstrated that treatment with FluCide drug candidates provided clear and strong protection against lung damage caused by the severe influenza infection. In addition, in this study, these optimized FluCide™ drug candidates achieved 1,000-fold reduction in the levels of infectious virus in the lungs of animals with a lethal level of influenza virus infection. The amount of infectious virus in the lungs of the infected animals treated with three of the optimized FluCide™ nanoviricide drug candidates was reduced by greater than 1000-fold as compared to the infected untreated control animals (p-values < 0.001), four days after virus infection. In contrast, animals treated with Oseltamivir (Tamiflu®, Roche) showed less than a 2-fold reduction in lung viral load at the same time point. This indicated a 500-fold greater reduction in viral load by FluCide drug candidates over Oseltamivir. Of great clinical significance is the fact that 2 of the optimized FluCide™ drug candidates maintained this greatly reduced lung viral load at 7, 13 and 19 days after virus infection in this 21 day study. Thus, treatment with the optimized FluCide drug candidates appeared to protect against the complete cycle of infection, virus expansion and spread of infection in the lungs that follows the initial virus infection. This was not the case for the Oseltamivir-treated animals. Animals treated with Oseltamivir (Tamiflu®, Roche) showed less than a 2-fold reduction in lung viral load at 4 days and the viral load was increased at 7 days to the same level as that found in the infected, untreated control animals shortly before their death.

In September 2011, we announced that we have selected a clinical candidate, designated NV-INF-1, for FDA submission in our highly successful FluCide™ anti-influenza therapeutics program. The Company submitted a pre-IND application to the FDA for this clinical candidate and held a pre-IND meeting with the US FDA in March, 2012. The Company is planning a high strength “piggy-back infusion” dosage form for hospitalized patients with severe influenza. The Company has since developed an orally active anti-influenza drug candidate as well, for use in out-patients. The Company will continue the development of these two drug candidates towards an IND, based on the guidance it received in the first pre-IND meeting.

The studies of biological testing of materials provide information that is relatively easy to understand and therefore readily reported. In addition, we continue to engage in substantial work that is needed for the optimization of synthesis routes and for the chemical characterization of the nanoviricide drug candidates. We also continue to work on improving the drug candidates and the virus binding ligands where necessary. We continue to work on creating the information needed for the development of controlled chemical synthesis procedures that is vital for developing c-GMP manufacturing processes.

The Company also announced in May 2012 that a fundamental patent, on which the nanoviricides® technology is based, is due to be issued in the USA on May 8, 2012. The US Patent (No. 8,173,764) is granted for "Solubilization and Targeted Delivery of Drugs with Self-Assembling Amphiphilic Polymers." It was issued on May 8, 2012. The patent term is expected to last through October 1, 2028, including anticipated extensions in compensation for time spent in clinical trials. This US Patent has been allowed with a very broad range of claims to a large number of families of chemical structure compositions, pharmaceutical compositions, methods of making the same, and uses of the same. The disclosed structures enable self-assembling, biomimetic nanomedicines. NanoViricides, Inc. holds exclusive, perpetual, worldwide licenses to these technologies for a broad range of antiviral applications and diseases. The other national and regional counterparts of the international Patent Cooperation Treaty ("PCT") application number PCT/US06/01820, which was filed in 2006, have issued as a Singapore National Patent Publication, a South African patent, and also as an OAPI regional patent covering Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Republic of Congo, Cote d'Ivoire, Equatorial Guinea, Gabon, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Senegal, and Togo. It has also issued as a granted patent in New Zealand, China, Mexico, and Japan. Estimated expiry dates range nominally from 2026 to 2028 with various extensions accounting for delays in clinical trials. Additional issuances are expected in Europe, and in several other countries around the world.

In addition, the counterparts of the international PCT application PCT/US2007/001607 have issued as a granted patent in New Zealand, OAPI, Pakistan, Australia, South Africa, and Mexico to date. Additional issuances are expected in Europe, USA, and in several other countries around the world. This patent application teaches antivirals based on the TheraCour polymeric micelle technologies, their broad structures and compositions of matter, pharmaceutical compositions, methods of making the same, and their uses. The nominal expiry dates are expected to range from 2027 to 2029.

To date, these two international patent applications have resulted in twenty patents in different countries and regions. All of the resulting patents have substantially broad claims. Prosecution in several additional regions and countries is continuing.

This year we have continued to improve our laboratory infrastructure, adding several new instruments and further chemistry capabilities. We have purchased substantial amounts of laboratory equipment for the characterization of our nanomaterials. We are acquiring the capabilities for synthesis, small scale-up, and production of our drug candidates. These are needed for the ensuing development work towards the goal of filing an IND application.

In September 2011, we announced the acquisition by Inno-Haven, LLC of an 18,000 square foot building on 4 acres with possibility of expansion in Shelton, CT. Inno-Haven LLC, a special purpose company formed to acquire the facility, completed the purchase on August 31, 2011. Financing for the acquisition by Inno-Haven was provided by certain private investors that included Anil R. Diwan, PhD. Dr. Diwan is President and Chairman of the Company and Managing Member of Inno-Haven. Dr. Diwan's part of the financing came from his personal savings, personal borrowings, and a sale of some of his shares of NanoViricides, Inc. received as a founder. In October, 2012, Dr. Diwan completed the programmed sale of the NanoViricides stock that he had obtained as a founder. The Company had agreed to this stock sale in order to help partially offset the costs for the acquisition of a facility and of architectural and engineering design of its renovation. Additionally, Dr. Diwan has agreed to provide personal guarantees, as needed, for certain additional contemplated transactions. The Company has previously announced that it had determined that this financing approach provided the best value for the Company and its shareholders. Inno-Haven has since raised substantial additional capital financing to enable total renovation of this facility into a cGMP manufacturing facility and associated R&D laboratories to suit the purpose of NanoViricides, Inc. The Company anticipates that it will be leasing the laboratory facilities and cGMP production facility from Inno-Haven, for the cGMP manufacture of clinical batches of its nanoviricides® drug candidates against various viral diseases. No lease has been signed yet.

In this year, as in the previous year, we have also made significant strides in achieving exposure for the Company and its technologies. The Company's President, Anil R. Diwan, PhD, was invited to speak at the 1st International Symposium on Nanomedicine and Cancer Diagnostics at the University of Delaware held on August 16, 2012. Dr. Diwan was also invited to participate on the Panel on Nanomedicine & Nanodiagnosics at the Nanomanufacturing Summit 2012 & 11<sup>th</sup> Annual NanoBusiness Conference on September 5, 2012, held at the Seaport Hotel, Boston, MA. Dr. Diwan also presented a poster at the Company Showcase in the Biotech2012 Symposium held by PennBio in Philadelphia, PA on October 22, 2012. Dr. Diwan also presented the Company's accomplishments at the BIO CEO 2013 Conference held at Waldorf Astoria, New York City on February 12, 2013. On March 22, 2013, Dr. Diwan gave an invited Special Seminar at the UCLA Center for Biological Physics, jointly with the California NanoSystems Institute, exploring the theoretical aspects as well as the experimental results of the nanoviricides approach. On April 24, 2013, Dr. Diwan, presented an overview of the company at the 2013 BIO International Convention held at the McCormick Center in Chicago, Illinois (<http://convention.bio.org/>). On June 27, 2013, Dr. Anil R. Diwan, presented an overview of the company at the OneMedForum-New York 2013 held at the Metropolitan Club, New York.

The Company's President, Dr. Anil Diwan, was invited to lead the Section 1, "Designing Nanomedicines", with Dr. Mostafa Analoui of the Livingston Group. In addition, Dr. Randall Barton, the Company's Chief Scientific Officer, lead Section 2, "Preclinical Pharmacology", with Dr. Benjamin Yerxa of Liquidia Technologies. These sections were part of the Symposium on Nanomedicines: Charting a Roadmap to Commercialization, a Conference that was divided into five sections. This Symposium was held at the Hilton Hotel in Rockville, MD, on the 6th and 7th of March, 2013.

In addition, the Company announced on October 24, 2011, that information about its novel, proprietary anti-virus platform technology has been published in the book "Bionanotechnology II: Global Prospects." The chapter entitled "Nanoviricides - A Novel Approach to Antiviral Therapeutics" provides an in-depth presentation of the NanoViricides platform technology.

We believe that these presentations, resulting exposure, and related meetings and discussions have been extremely beneficial to the Company. This exposure as well as our continuing successes in the drug development efforts have enabled us to achieve significant amounts of financing this year.

The Company has been successful in raising necessary funds this year as well as last year.

On June 28, 2012, the Company raised financing of \$5M, drawing down on its previously announced universal registered shelf "Form S-3" offering. The Company received this financing from a single investor, Seaside 88, LP ("Seaside"), a Florida limited partnership. On June 28, 2012, the Company received \$2.5M upon closing, with a net of approximately \$2.32M after deducting brokerage commission and expenses. NanoViricides entered into a securities purchase agreement with Seaside for the purchase and sale of up to 5,000 shares of its newly created Series C Preferred Stock at the purchase price of \$1,000 per share. Seaside purchased an initial 2,500 shares of the Company's Series C Preferred Stock at the purchase price of \$1,000 per share for an aggregate purchase price of \$2,500,000. A certain number of the preferred C shares will convert to common stock automatically every 14 days. The amount of common stock issued at each conversion will be equal to 15% of the average volume of common stock traded in the previous two weeks, plus common stock resulting from conversion of accrued dividend. The Series C Preferred Stock is convertible into a number of shares of the Company's common stock every two weeks. Of the shares purchased, a certain number of shares of the Series C Preferred Stock will be automatically converted into a certain amount of common stock every two weeks beginning June 28, 2012. The amount of common stock to be issued is calculated as 15% of the average trading volume of the Company's shares in the previous 10 days of trading. The conversion price of the common stock at the conversion is calculated as the lesser of (i) the ten-day daily volume weighted average of actual trading prices ("VWAP") of the common stock multiplied by 0.85; or (ii) the VWAP for the trading day immediately prior to a conversion date multiplied by 0.88. The total dollar amount of common stock converted is divided by the \$1,000 purchase price of the Preferred Series C shares to arrive at the number of series C shares converted. In addition, the unconverted shares of the Series C Preferred Stock will accrue a dividend at a 10% annualized rate. The accrued dividend is payable in common stock at each conversion at the same price of conversion as above. The Company does not pay a dividend on the shares of its common stock or the shares of its Preferred Series A stock, and will not be able to pay any dividend on these securities while any shares of the Series C Preferred stock remain unconverted. The shares of Series C Preferred Stock and the shares of common stock underlying the Series C Preferred Stock and the dividend earned on it were offered pursuant to an effective shelf registration statement. The Series C Preferred Stock does not have any voting rights except as set forth in the Certificate of Designation, as amended, creating the stock. Midtown Partners & Co., LLC, acted as the placement agent for this transaction. Midtown received a cash placement fee of 6%. A shelf registration statement relating to the shares of common stock underlying the shares of preferred stock issued in the offering has been filed with the Securities and Exchange Commission (the "SEC") and has been declared effective. A prospectus supplement relating to the current transaction has been filed by NanoViricides with the SEC. The Series C Preferred stock limits the conversion based on the dollar volume in the market thus limiting dilution to our shareholders.

On December 21, 2012, the Company received the final tranche of \$2.5M from the total of \$5M Seaside financing of June 28, 2012. The Company received \$2.5M upon closing, with a net of approximately \$2.32M after deducting brokerage commission and expenses. Seaside purchased the final 2,500 shares of NanoViricides Series C Preferred Stock at the purchase price of \$1,000 per share for an aggregate purchase price of \$2,500,000. A certain number of the preferred C shares will convert to common stock automatically every 14 days. The amount of common stock issued at each conversion will be equal to 15% of the average volume of common stock traded in the previous two weeks, plus common stock resulting from conversion of accrued dividend (see below). There were no warrants associated with this transaction. The first conversion of Series C Preferred shares to common stock took place on Friday, December 21, 2012. Additional conversions will follow every fourteen days. The Series C Preferred Stock is convertible into a number of shares of the Company's common stock every two weeks. Of the shares purchased, a certain number of shares of the Series C Preferred Stock will be automatically converted into a certain amount of common stock every two weeks beginning December 21, 2012. The amount of common stock to be issued is calculated as 15% of the average trading volume of the Company's shares in the previous 10 days of trading. The conversion price of the common stock at the conversion is calculated as the lesser of (i) the ten-day daily volume weighted average of actual

trading prices (“VWAP”) of the common stock multiplied by 0.85; or (ii) the VWAP for the trading day immediately prior to a conversion date multiplied by 0.88. The total dollar amount of common stock converted is divided by the \$1,000 purchase price of the Preferred Series C shares to arrive at the number of series C shares converted. In addition, the unconverted shares of the Series C Preferred Stock will accrue a dividend at a 10% annualized rate. The accrued dividend is payable in common stock at each conversion at the same price of conversion as above. The Company does not pay a dividend on the shares of its common stock or the shares of its Preferred Series A stock, and will not be able to pay any dividend on these securities while any shares of the Series C Preferred stock remain unconverted. The shares of Series C Preferred Stock and the shares of common stock underlying the Series C Preferred Stock and the dividend earned on it were offered pursuant to an effective shelf registration statement. The Series C Preferred Stock does not have any voting rights except as set forth in the Certificate of Designation, as amended, creating the stock. Midtown Partners & Co., LLC, acted as the placement agent for this transaction. Midtown received a cash placement fee of 6% and an expense reimbursement for legal and other expenses of \$15,000. A shelf registration statement relating to the shares of common stock underlying the shares of preferred stock issued in the offering has been filed with the Securities and Exchange Commission (the “SEC”) and has been declared effective. A prospectus supplement relating to the current transaction has been filed by NanoViricides with the SEC.

To date, the investor firm Seaside 88, LP, has invested \$25M into our Company, drawing down from our “Universal Form S-3 Shelf Registration” which has been effective since April 29, 2010. This financing vehicle has enabled us to keep dilution to existing shareholders to a minimum.

On February 1, 2013, the Company raised \$6M from four equity investors in our Series B Debentures offering. The investors included three prior investors (family offices) and a charitable foundation. The investors purchased unsecured convertible debentures with a 4-year term. The debentures bear an interest rate of 8% p.a., an additional interest payable in restricted common stock of 0.33, 0.33, and 0.34 shares in year 1, 2, and 3 respectively, and an additional interest of 0.33 warrants to be issued in the fourth year, per \$1 of principal. The warrants are priced at \$1 (pre-split) and will be valid for 3 years after issuance. The investors can convert the principal and any accrued interest into common stock at a fixed price of \$1 per pre-split share. The Company can prepay the debentures, in which case the base interest rate shall increase by a 7% prepayment penalty. The Company agreed to use its best efforts to register the interest shares and the shares issuable from the interest warrants under a “shelf” registration statement provided same is available, in accordance with the provisions of the Securities Act. The Offering was conducted directly by the Company without the use of a placement agent. Accordingly, no placement agent fees or other commissions were paid by the Company in connection with the Offering. A current report “Form 8-K” has been filed with the SEC.

On February 21, 2013, the Company redeemed the remaining outstanding Series C Preferred shares held by Seaside 88 LLC and paid a total \$2,014,921. This amount included the unconverted value of the Series C Preferred shares outstanding, dividend then due and a redemption fee.

With these successful financing efforts, and our continued low rate of expenditure, the Company estimates that it now has cash in hand sufficient for at least two years of further R&D and operating expenses. In addition, the Company has successfully achieved the goal of securing a building for a new lab facility and cGMP capability without any capital expenditures. We thus ended the financial year in a better financial position than the last year. This new financial strength has enabled us to move forward in our drug development programs. We are now tackling the major challenge of cGMP manufacturing capability. Our FluCide program is rapidly moving towards the Investigational New Drug (“IND”) filing stage. We believe that our other programs are also progressing successfully towards the regulatory submissions goal.

Subsequent to the financial year end, on September 10, 2013, the Company raised approximately \$10.3 Million in a registered direct offering to accredited investors and certain institutional investors. The Company received approximately \$9.66 Million in proceeds after deducting approximately \$670 thousand for broker commissions and attorney fees. The Company executed the said registered direct offering to accredited family funds and investors and to institutional investors immediately following a reverse split of the stock at a 1 to 3.5 ratio that became effective on Tuesday, September 10th. Each unit of this registered direct offering consists of one share of (post-split) common stock and one 5-year warrant. The warrants have an exercise price of \$5.25 per share. The units were offered by Nanoviricides pursuant to an effective shelf registration statement filed with the Securities and Exchange Commission dated October 26, 2012. Midtown Partners & Co., LLC and Chardan Capital Markets, LLC served as the exclusive placement agents for the transaction. The closing of this placement took place on Friday, September 13, 2013, subject to the satisfaction of customary closing conditions. The pricing of the unit was based on a 20% discount to the 20-day VWAP (volume-weighted average price) of the Company’s common stock. Based on similar recent transactions, the Company determined that this was a fair pricing policy and adopted the pricing. In connection with the Offering, pursuant to a Placement Agency Agreement dated September 9, 2013 among Midtown Partners & Co., LLC and Chardan Capital Markets, LLC (collectively, the “Placement Agents”), the Company paid the Placement Agents an aggregate cash fee representing 6% (3% each) of the gross Purchase Price paid by the Purchasers and warrants to

purchase an aggregate of 2% (1% each) of the number of shares of Common Stock sold in the Offering (the “Compensation Warrants”) representing two percent of the Shares and substantially similar to the Warrants, at an exercise price equal to \$5.25 per share. The Offering was made pursuant to the Company’s shelf registration statement on Form S-3 (File No. 333-184626) which was declared effective by the SEC on December 21, 2012.

## **Our Corporate History**

NanoViricides, Inc. was incorporated under the laws of the State of Colorado on July 25, 2000 as Edot-com.com, Inc. and was organized for the purpose of conducting Internet retail sales. On April 1, 2005, Edot-com.com, Inc. was incorporated under the laws of the State of Nevada for the purpose of re-domiciling the Company as a Nevada corporation, Edot-com.com (Nevada). On April 15, 2005, Edot-com.com (Colorado) and Edot-com.com (Nevada) were merged and Edot-com.com, Inc., (ECMM) a Nevada corporation, became the surviving entity. On April 15, 2005, the authorized shares of common stock was increased to 300,000,000 shares at \$.001 par value and the Company effected a 3.2 to 1 forward stock split effective May 12, 2005.

On June 1, 2005, Edot-com.com, Inc. acquired NanoViricide, Inc., a privately owned Florida corporation (“NVI”), pursuant to an Agreement and Plan of Share Exchange (the “Exchange”). NVI was incorporated under the laws of the State of Florida on May 12, 2005 and its sole asset was comprised of a licensing agreement with TheraCour Pharma, Inc., (“TheraCour,” an approximately 24.9% shareholder of NVI) for rights to develop and commercialize novel and specifically targeted drugs based on TheraCour's targeting technologies, against a number of human viral diseases. (For financial accounting purposes, the acquisition was a reverse acquisition of the Company by NVI, under the purchase method of accounting, and was treated as a recapitalization with NVI as the acquirer). Upon consummation of the Exchange, ECMM adopted the business plan of NVI.

Pursuant to the terms of the Exchange, ECMM acquired NVI in exchange for an aggregate of 80,000,000 newly issued shares of ECMM common stock, resulting in an aggregate of 100,000,000 shares of ECMM common stock issued and outstanding. As a result of the Exchange, NVI became a wholly-owned subsidiary of ECMM. The ECMM shares were issued to the NVI Shareholders on a pro rata basis, on the basis of 4,000 shares of the Company’s Common Stock for each share of NVI common stock held by such NVI Shareholder at the time of the Exchange.

On June 28, 2005, NVI was merged into its parent ECMM and the separate corporate existence of NVI ceased. Effective on the same date, Edot-com.com, Inc., changed its name to NanoViricides, Inc. and its stock symbol on the Pink Sheets to “NNVC”, respectively. The Company submitted a Form-10SB to the SEC to become a reporting company on November 14, 2006. The Company’s filing status became effective in March, 2007. On June 28, 2007, the company became quoted on the OTC Bulletin Board under the symbol NNVC. The Company is considered a development stage company at this time.

On September 10, 2013, the Company adopted a uniform reverse split of its securities in a 3.5 to 1 ratio, reducing its authorized common stock to 85,714,287 shares at \$0.001 par value, in order to satisfy the share price listing requirements of US National exchanges. On Wednesday, September 25, 2013, the Company’s common stock began trading on the New York Stock Exchange MKT (NYSE MKT) under the same symbol, namely “NNVC”.

NanoViricides, Inc. (the “Company”), is a nano-biopharmaceutical (nanomedicine) company whose business goals are to discover, develop and commercialize therapeutics to advance the care of patients suffering from life-threatening viral infections. We are a development stage company with several drugs in various stages of early development. The Company’s drugs are based on several patents, patent applications, provisional patent applications, and other proprietary intellectual property held by TheraCour Pharma, Inc. (“TheraCour®”), to which the Company has exclusive licenses in perpetuity for the treatment of the following human viral diseases: Human Immunodeficiency Virus (HIV/AIDS), Influenza including Asian Bird Flu Virus (INF), Herpes Simplex Virus (HSV), Hepatitis C Virus (HCV), Hepatitis B Virus (HBV), and Rabies. On February 15, 2010, the Company entered into an Additional License Agreement with TheraCour granting the Company the exclusive licenses in perpetuity for technologies developed by TheraCour for the additional virus types for Dengue viruses (DENV), Japanese Encephalitis (JEV), West Nile Virus (WNV), viruses causing viral Conjunctivitis (a disease of the eye) and Ocular Herpes, and Ebola/Marburg viruses.

The Company focuses its research and clinical programs on specific anti-viral therapeutics and is seeking to add to its existing portfolio of products through its internal discovery and clinical development programs and through an in-licensing strategy. To date, the Company has not commercialized any product.

The Company has incurred significant operating losses since its inception resulting in an accumulated deficit of \$38,299,783 at June 30, 2013. For the year ended June 30, 2013, the Company had a net loss of \$8,875,667. Such losses are expected to continue for the foreseeable future and until such time, if ever, as the Company is able to attain sales levels sufficient to support its operations.

To date, we have engaged in organizational activities; sourcing compounds and materials; developing novel compounds and nanomaterials, and experimentation with studies on cell cultures and animals. We have generated funding through the issuances of debt, private placement of common stock, and sale of registered securities. We have

not generated any revenues and we do not expect to generate revenues in the near future. We may not be successful in developing our drugs and start selling our products when planned, or that we will become profitable in the future. We have incurred net losses in each fiscal period since inception of our operations.

The Company currently has no long term debt excluding the Series B Convertible Debentures in the amount of \$6M as described earlier.

## **Glossary of Terms**

Nano - When used as a prefix for something other than a unit of measure, as in "nanoscience," nano means relating to nanotechnology, or on a scale of nanometers (one billionth of a meter or greater).

Viricide - An agent which reliably deactivates or destroys a virus.

Nanoviricide® – An agent which is made by attaching ligands against a certain virus or family of viruses to a nanomicelle based on the Company's patent-pending and proprietary technologies.

Ligand - A short peptide or chemical molecule fragment that has been designed to specifically recognize one particular type of virus.

Micelle - an aggregate of molecules in a solution, such as those formed by detergents.

Nanomicelle - Micelles on the scale of nanometers.

Pendant polymeric micelles- A polymeric micelle forms from a polymer whose chemical constitution is such that even a single chain of the polymer forms a micelle. A pendant polymer is a polymer that has certain units in its backbone that extend short chains branched away from the backbone. Pendant Polymeric Micelles therefore are polymeric micelle materials that are a class of pendant polymers, and naturally form exceptionally well-defined, self-assembling, globular micelles with a core-shell architecture.

Mutations - The ability (of a virus) to change its genetic structure to avoid the body's natural defenses. Mutants are viruses created from a parent virus strain through a process of natural selection under pressure as it replicates in a host.

P-Value- In statistical hypothesis testing, the p-value is the probability of obtaining a result at least as extreme as that obtained, assuming that the null hypothesis is true; wherein the truth of the null hypothesis states that the finding was the result of chance alone. The fact that p-values are based on this assumption is crucial to their correct interpretation. The smaller the p-value, the greater is the probability that the observed study results and the comparison control are distinct, and therefore that the study results are not a result of chance alone.

More technically, the p-value of an observed value observed of some random variable T used as a test statistic is the probability that, given that the null hypothesis is true, T will assume a value as or more unfavorable to the null hypothesis as the observed value observed. "More unfavorable to the null hypothesis" can in some cases mean greater than, in some cases less than and in some cases further away from a specified center value.

Investigational New Drug Application (Investigational New Drug ("IND"))-The process of licensure of a new drug in the US goes through several steps. A simplified explanation of these steps is as follows. Initially a Company may file a pre-IND application to seek meetings with the FDA for guidance on work needed for filing an IND application. The Company obtains data on the safety and effectiveness of the drug substance in various laboratory studies including cell cultures and animal models. The Company also obtains data on chemical manufacturing of the drug substance. These and certain additional data are used to create an IND which the Company files with the FDA. After the FDA approves an IND application, the Company may conduct human clinical studies. A Phase I human clinical trial is designed typically to evaluate safety of the drug and maximum permissible dosage level. A Phase II human clinical trial that follows is designed to evaluate effectiveness of the drug against the disease in a small cohort of patients. A Phase III human clinical trial thereafter is designed to evaluate effectiveness and safety in larger groups of patients, often at multiple sites. The Company may then submit an NDA (New Drug Application) with the data collected in the clinical trials. The FDA may approve the NDA. Once the NDA is approved, the Company can sell the drug in the USA. European countries have similar processes under the European Medicines Agency (EMA). Other countries have similar processes.

SAR: Structure-Activity-Relationship study. When an initial lead drug compound is found that has activity, further studies on drug compounds obtained by suitably modifying it are performed with the goal of improving efficacy, safety, or both. Such studies are called SAR studies.

## **NanoViricides Technologies, Products in Development, and Collaborations**

Pharmaceutical drug development is an expensive and long duration proposition. Management's plan is to develop each of our nanoviricides to the necessary stage(s) and then engage into licensing or co-development relationships with other pharmaceutical companies. Such licensing or co-development relationships usually may entail upfront payments, milestones payments, cost-sharing, and eventual revenue-sharing, including royalty on sales. There is no guarantee that we will be able to negotiate agreements that are financially beneficial to the Company at the present stage. Management plans to continue to raise additional funds as needed for our continuing drug development efforts on public markets.

The Company currently has several drug development programs. Our drug development programs with large commercial interest include (1) an injectable drug for hospitalized patients with Influenza, (2) an oral drug for outpatients with Influenza (3) HIV, (4) Topical Eye Drops for viral diseases of the external eye, (5) Herpes "cold sores" and genital Herpes, and (6) Dengue viruses. In addition, the Company believes that, as the holder of potentially paradigm-shifting antiviral drug development technologies, it has a social responsibility to develop drugs against diseases affecting large segments of worldwide populations. In our Social Responsibility programs, we are developing drugs against Neglected Tropical Diseases (NTDs) caused by viruses such as Dengue viruses and Rabies. The Company also has BioSecurity programs that include drug development against hemorrhagic fever viruses such as Ebola/Marburg, and a unique technology that we call "ADIF<sup>TM</sup>" to combat natural or bioterrorism attacks by novel viruses as happened with SARS and may happen with engineered viruses. The Company plans to perform its NTD and BioSecurity R&D and drug development in collaboration with Institutes of renown and with public funding, in order to minimize the strain on our resources. The Company believes that this work provides direct benefits to our commercially important programs. The Company will continue its efforts to obtain federal financing for development of these technologies. However, the Company may not be successful in obtaining such financing. The Company has limited resources and its ability to work on such projects that are deemed of low commercial value is very limited.

Our Collaborations and Service Contracts in Brief

Our development model is to employ collaborations and service contract relationships with renowned academic labs, government labs, as well as service contracts with external service providers in order to minimize our capital requirements. Our current relationships include:

For Influenza Viruses:

1. KARD Scientific, Inc., MA.
2. Southern Research Institute, AL.
- 3 TheVac, LLC, LA.
- 4 National (Central) Institute of Hygiene and Epidemiology (NIHE) (Vietnam), for H5N1 avian flu.

For HIV:

1. KARD Scientific, Inc., MA.
2. Southern Research Institute, Frederick, MD.
- 3 University of California at San Francisco (Dr. Cheryl Stoddart, PI), CA.

For Viral Diseases of the Eye (Adenoviruses, Herpesviruses - Epidemic Kerato-conjunctivitis (EKC), Herpes Keratitis):

1. The Long Island Jewish Medical System, Feinstein Institute of Medical Research (LIJMS), NY.
2. TheVac, LLC.

For Herpes Virus Infections:

1. TheVac, LLC
2. Northeastern Ohio Medical University (NEOMED), previously NEOUCOM, Prof. Ken Rosenthal Lab.

For Dengue Hemorrhagic Fever Viruses:

1. University of California at Berkeley, Prof. Eva Harris Lab.

For Ebola/Marburg Viruses:

1. United States Army Medical Institute of Infectious Diseases (USAMRIID), Dr. Gene Olinger Lab.

For Rabies Virus:

1. Center for Disease Control and Prevention (CDC), Dr. Charles Rupprecht Lab.

2. National (Central) Institute of Hygiene and Epidemiology (NIHE), Vietnam.

In addition, this year we have signed an agreement with the Biologics Consulting Group (BCG), Alexandria, Virginia, to help us with the US FDA applications processes, and with the development of applications as well as drug development programs, as needed. We have also signed an agreement with Australian Biologics Pty, Ltd. to help us with the regulatory processes in Australia.

We have additional collaborations in the process of formalization. In particular, we have signed a Non-Disclosure Agreement with Public Health England (PHE), the British government's equivalent of the U.S. Centers for Disease Control, in July 2013. The agreement will allow the scientists at Public Health England to develop a specific proposal for the testing of different nanoviricides, such as FluCide™, against viruses of "mutual interest" to both organizations. More specifically, the first two viruses of mutual interest are H7N9, the influenza virus now circulating in China as well as the latest version of the coronavirus, now circulating in the Middle East. It is now referred to as the MERS virus. This virus is similar to the SARS virus that infected 8000 people and killed approximately 800 people 10 years ago. Both H7N9 and the MERS CoV (coronavirus) have extremely high case fatality rates. Testing of nanoviricide antiviral drug candidates is expected to be performed in a BSL3/4 facility at PHE. BSL3/4 facilities are designed to contain and enable the safe handling of organisms that can pose a significant threat to health. We anticipate that this agreement will further evolve into a collaborative agreement.

We have also signed a Non-Disclosure Agreement with the Lovelace Respiratory Research Institute, Albuquerque, NM. The Company intends to enter into a Master Services Agreement with LRRI for the IND-enabling efficacy studies of both its broad-spectrum injectable and oral FluCide® drug candidates. These studies are expected to employ multiple unrelated subtypes and strains of Influenza A, including the novel H7N9 strain, the subtype which is currently circulating in China. The Company has already shown that the injectable and oral FluCide drug candidates are substantially more effective than oseltamivir (Tamiflu®) in controlling influenza A virus infections in a highly lethal animal model using two unrelated subtypes of influenza A, namely H1N1 and H3N2. In addition to FluCide, LRRI is also expected to evaluate the Company's anti-MERS drug candidates in cell culture and animal models when available. The NDA enables the scientists at the Company and LRRI to exchange confidential and proprietary information in preparation.

We typically employ more than one external laboratory to perform testing for a particular disease agent in order to limit possible laboratory level bias. We previously had a collaborative research agreement with the Walter Reed Army Institute of Research (WRAIR), Dr. Putnak Lab, for work on dengue viruses. This agreement has since lapsed, but we believe it can be reactivated at an opportune time.

We have developed lead drug candidates against a number of viral diseases. Proof-of-principle efficacy studies in animals have been conducted successfully in many of these. We have declared a clinical candidate for influenza, the injectable NV-INF-1, We have also developed an orally active form of this anti-influenza drug candidate.

### **The Nanoviricides Concept and Antiviral Strategy**

Nanoviricides are designed to work by binding to and eliminating virus particles from the blood-stream, just as antibodies do, only potentially much better. Treating a patient that has a viral infection with a nanoviricide against that virus is expected to result in reduction in viremia. Reduction in viremia is an important goal in diseases caused by all viral infections.

A nanoviricide is constructed by chemically attaching a ligand designed to bind to a virus particle, to a polymeric material that forms a flexible nanomicelle by self-assembly. If antibodies are known to affect a viral disease, it is possible to construct a nanoviricide against it, and there can be a general expectation of some success, depending upon the ligand chosen. We can choose a ligand from any of a number of chemical classes, including small chemicals, peptides, or antibody fragments or even whole antibodies.

The Company owns an exclusive worldwide license in perpetuity to technology that enables the creation of nanoviricides. A "nanoviricide®" is a flexible nano-scale material approximately a few billionths of a meter in size, comparable to the size of a virus particle, which is chemically programmed by a "ligand" to specifically target and

attack a particular type of virus.

In addition, a nanoviricide is also capable of simultaneously delivering a devastating payload of active pharmaceutical ingredients (API) into the virus particle, to destroy its genome (RNA/DNA). We plan to implement this strategy against viruses which cannot be cured without an encapsulated API. In our current drug programs, we have not employed any antiviral API payload.

A nanoviricide is designed to “look like” the portion of a cell membrane to which a virus particle binds, in a sense. This biomimetic approach is expected to fool the virus into binding to the nanoviricide, and in an attempt to “enter” it, it is thought that the virus particle may get destroyed. This is because viruses have developed ways of un-coating themselves once they enter a cell, in order to expose the viral genomic material so that the virus can hijack the cellular machinery to make its own copies. We call this the “passive view” of how a nanoviricide may work.

A nanoviricide is designed as a flexible material, that self-assembles, at about the same size scale as a typical virus particle. The flexible material we use is one type of a special polymeric material called TheraCour®, invented by the Company’s founders. It assembles in solution into a flexible ball, somewhat like a ball of hair. We call this a nanoviricide micelle, or “nanomicelle” for short. On first contact with a virus particle, a nanoviricide micelle may bind to a virus particle because of specific interaction between a ligand attached to the nanoviricide and the glycoproteins on the virus surface. This may cause the flexible nanoviricide to reach very close to the virus surface, leading to additional ligands binding to additional viral coat proteins, in a mode called “cooperative binding”. Cooperative binding is a well-known natural process that forms the basis of biological recognition such as antibody-antigen binding, DNA hybridization, and protein assembly, among others. Eventually it is thought that the interior of the nanomicelle, which is lipidic (oil-like) in nature, would fuse with the exterior lipidic coat of the virus particle. This lipidic fusion is also a well-known natural process. Such fusion may lead to the flexible nanomicelle spreading onto the virus surface much like an oil-slick covering a golf ball. In the process, the coat proteins that the virus uses for binding to cells may be expected to become unavailable, and are also likely to even get stripped off completely. The virus particle would then be rendered incapable of binding to a cell, and thus no longer infectious or capable of causing disease or of making copies of itself. We call this the “active view” of how a nanoviricide may work.

One may allegorically say that a nanoviricide has many “arms” and “legs”. The “arms” are the virus binding ligands, that grab the virus surface glycoproteins. Then the “legs”, the lipid chains in the interior of the nanomicelle, “kick” into and crush the lipid envelop of the virus. This may cause the virus particle to fall apart.

Nanoviricides thus are designed to employ the “Bind-Encapsulate-Destroy” strategy, which is akin to the “Find-Encircle-Destroy” war strategy that has been successfully employed historically in many wars.

Antibodies are a major defense of humans and animals against viruses. After a person is infected by a particular virus, he/she develops antibodies against the virus. The infection is fully controlled after a strong antibody response develops. Subsequent exposure to the same virus does not cause disease, because the appropriate memory cells are activated into producing the correct antibody. However, antibodies by themselves do not destroy a virus particle. After a few antibodies bind to a virus particle, several processes must take place that eventually lead to destruction of the virus particle. Many viruses have developed ways of dysregulating this complex immune response cascade.

Nanoviricides, on the other hand, are designed as “programmed nanomachines” capable of executing the entire strategy of “Bind- Encapsulate-Destroy” without any dependence on or assistance from the human immune system.

Antibodies also may be too specific to a particular virus strain, and thus viruses evade antibodies by changing their external surface. Vaccines create antibodies in the recipient, in order to protect the person. Vaccines are thus limited by the nature of antibodies, and tend to be very specific to the particular strains or groups of strains of a virus. This is why a new seasonal vaccine must be formulated for influenza every year. This is also why a novel influenza strain such as bird flu (H5N1) or the 2009/”Swine flu” virus cannot be defended against by existing vaccines.

It is well known that every virus retains its ability to bind to the same features on the cell surface at the same site on the cellular receptor, despite all evolutionary/spontaneous changes that it constantly undergoes such as mutations, re-assortments, recombinations, etc.,. In designing a nanoviricide, we pay particular attention to the design and selection of a ligand. We generally choose a ligand that mimics the cell surface features to which all virus strains of a particular virus are known to bind. We therefore believe that a resistant viral strain against a nanoviricide would be far less likely to occur than resistance development against any other antiviral agent strategy. If, however, such resistance does occur, a new nanoviricide can be developed by changing the ligand appropriately.

### **The NanoViricides Technology and Approach**

Nanoviricide drugs, which are presently in a preclinical stage of development, are designed to lead to reduction in viremia by a set of novel, multiple, concerted, mechanisms:

1. Each nanoviricide drug is designed as a specifically targeted antiviral agent for a particular type of virus or group of viruses. Often side effects of a drug may be correlated with non-specific interactions with the host cells, tissues,

and organs. Most existing anti-viral agents are known to have non-specific effects against both host cells and viral machinery at the same time. Most existing anti-viral agents act inside human cells. It is believed that this intracellular mechanism leads to significant opportunities for non-specific effects against host cells. Nanoviricides, on the other hand, are designed to work directly against virus particles in bodily fluids. The Company believes that this approach may make nanoviricides inherently safer than existing approaches.

2. A nanoviricide is designed to seek and attach to a specific virus particle, engulfing the virus particle in the process, thereby rendering it incapable of infecting new cells, and disabling it completely. This suggested mechanism of action comprises much more than what the current entry and fusion inhibitors are expected to do. The fusion and entry inhibitors do not completely cover the virus particle and likely block only a few sites on the virus particle, which means the virus particle may still be capable of infecting cells using its unblocked attachment sites. In contrast, a nanoviricide is expected to engulf the virus particle completely, because of its larger size and flexible nature, thus disabling the virus particle completely. The action of a nanoviricide, if it works as designed, in this regard may be expected to be superior to antibody agents that attack viruses. Antibodies, being large, are expected to block relatively greater portions of the virus particle surface compared to small molecule entry inhibitors. However, antibodies depend upon the human immune system responses for clearing up the virus particle. In contrast, nanoviricides are thought to be capable of acting as completely programmed chemical robots that finish their task of destroying the virus particle on their own.

3. A nanoviricide is designed to be capable of encapsulating an active pharmaceutical ingredient (API) in its core, or “belly”. This is expected to reduce toxic effects of the API. Such encapsulating methods are currently being used in anti-cancer therapy and have shown reduced toxicity as well as increased efficacy (see <http://nihroadmap.nih.gov/nanomedicine/>).

4. A nanoviricide is designed to deliver any encapsulated API directly into the core of the virus particle. This is proposed to result in maximal effect against the anti-viral targets, such as the viral genomic materials. Our goal for this specifically targeted delivery of the API is to minimize toxic effects and also improve efficacy of the API. (see <http://www.nci.nih.gov> ).

5. With this concerted targeted set of mechanisms, our objective is for the nanoviricide to be programmed to (a) prevent the virus particle from being able to infect new cells, (b) dismantle the virus particle, and (c) destroy the genetic material of the virus particle, thereby completely destroying the target. Our complete systems engineered approach to anti-viral therapy is in stark contrast with the current piece-meal approaches. Current drug therapies often have extensive toxicities, limited efficacies, and generation of mutants (mutated viruses) through selective incomplete pressure applied by the therapeutic regime onto the virus.

We designed the nanoviricides to act by completely novel and distinctly different mechanisms compared to most existing anti-viral agents. The self-assembling nanoviricide “Trojan horses” would be expected to course through the blood stream, seek their target, i.e. a specific virus particle, attach themselves to the virus particle target and fuse with the virus particle. This chain of events, if it in fact occurs, is designed to destroy the virus particle's ability to infect host cells. In addition, if the nanoviricide may contain an encapsulated API, such API may be deployed into the virus particle and might lead to destruction of the virus genetic material (such as viral DNA, viral RNA, etc.), and/or key viral components that the virus carries inside its “belly” (such as the reverse transcriptase, the protease, and the integrase carried by HIV particles), based on the capabilities of the API. This concept needs to be extensively tested in future experiments. The concept of targeted delivery of an API is well known in the cancer therapeutics arena as this quote from the National Cancer Institute website above makes clear: “Nanoscale devices have the potential to radically change cancer therapy for the better and to dramatically increase the number of highly effective therapeutic agents. Nanoscale constructs can serve as customizable, targeted drug delivery vehicles capable of ferrying large doses of chemotherapeutic agents or therapeutic genes into malignant cells while sparing healthy cells, greatly reducing or eliminating the often unpalatable side effects that accompany many current cancer therapies.”

[http://nano.cancer.gov/resource\\_center/nano\\_critical.asp](http://nano.cancer.gov/resource_center/nano_critical.asp) - cancer.

We designed the nanoviricides to act by a novel set of multiple, concerted, mechanisms. However, being so novel, our drugs are not directly comparable to existing anti-viral therapies. Thus, the safety and efficacy of the nanoviricides needs to be established by experimentation, and cannot be anticipated on the basis of any similar information regarding existing drugs. See Part I, Preclinical Safety And Efficacy Studies.

It is important to realize that the flexible nanoviricides nanomedicines show substantial advantages over hard sphere nanoparticles in this antiviral drug application. Hard sphere nanomaterials such as dendritic materials (dendrimers), nanogold shells, silica, gold or titanium nanospheres, polymeric particles, etc., were never designed to be capable of completely enveloping and neutralizing the virus particle.

The Company does not claim to be creating a cure for viral diseases. The Company's objectives are to create the best possible anti-viral nanoviricides and then subject these compounds to rigorous laboratory and animal testing towards US FDA and international regulatory approvals. Our long-term research efforts are aimed at augmenting the nanoviricides that we currently have in development with additional therapeutic agents to produce further improved anti-viral agents in the future. We believe that many viral infections that are at present untreatable or incurable would be curable using such an advanced approach.

The Company plans to develop several drugs through the preclinical studies and clinical trial phases with the goal of eventually obtaining approval from the United States Food and Drug Administration (“FDA”) and International regulatory agencies for these drugs. The Company plans, when appropriate, to seek regulatory approvals in several international markets, including developed markets such as Europe, Japan, Canada, Australia, and Emerging Regions such as Southeast Asia, India, China, Central and South America, as well as the African subcontinent. The seeking of these regulatory approvals would only come when and if one or more of our drugs, now in early stage of pre-clinical development, has significantly advanced through the US FDA and international regulatory process. If and as these advances occur, the Company may attempt to partner with more established pharmaceutical companies to advance the various drugs through the approval process.

There can be no assurance that the Company will be able to develop effective nanoviricides, or if developed, that we will have sufficient resources to be able to successfully manufacture and market these products to commence revenue-generating operations.

There can be no assurance that other developments in the field would not impact our business plan adversely. For example, successful creation and availability of an effective vaccine may reduce the potential market size for a particular viral disease.

Our goal, which we can give no assurance that we will achieve, is for NanoViricides, Inc. to become the premier company developing nanomedicines for anti-viral therapy.

### **Our Product Focus and Technologies**

The Company plans to develop several different nanoviricide drugs against a number of human viral diseases. The Company initially obtained an exclusive license in perpetuity to develop drugs based on technologies originally created by TheraCour Pharma, Inc., (TheraCour) against the following human viral diseases: H5N1 (Avian Flu), Human Influenza, Human Immunodeficiency Virus (HIV/AIDS), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), Herpes Simplex Virus (HSV), and Rabies, including all known strains of these viruses. The Company has entered into an Additional License Agreement with TheraCour granting the Company the exclusive licenses in perpetuity for technologies developed by TheraCour for the additional virus types for Dengue viruses, Japanese Encephalitis virus, West Nile Virus, Viruses causing viral Conjunctivitis (a disease of the eye) and Ocular Herpes, and Ebola/Marburg viruses.

We currently have, in early, active development, products against Epidemic Influenzas including the current novel H1N1/2009 “Swine flu” virus, H5N1 and other Highly Pathogenic Avian Influenzas (H5N, H7N, H9N HPAI, Bird Flu), common seasonal human Influenzas ((1) and injectable drug for hospitalized patients, and (2) an oral drug for the rest of the patients), (3) HIV (4) Eye drops against viral diseases of the eye such as conjunctivitis and keratitis, (5) Herpes virus cold sores and genital Herpes, and (6) Dengue viruses. In addition, we have research programs against the novel MERS CoV virus, Rabies virus, Ebola/Marburg family of viruses, as well as other Viral hemorrhagic fevers. We also have a research program called ADIF<sup>(TM)</sup> “Accurate-Drug-In-Field”, that we believe is the only way to combat a novel viral threat right in the field before it becomes an epidemic like SARS, bird flu H5N1, Ebola, or other viral outbreak. Adenoviral Epidemic Kerato-Conjunctivitis (EKC) is a severe pink eye disease that may lead to blurry vision in certain patients after recovery. Herpes simplex viral infections cause keratitis of the eye, and severe cases of infection may sometimes necessitate corneal transplants. The Company's ability to achieve progress in the drugs in development is dependent upon available financing and upon the Company's ability to raise capital. The Company will negotiate with TheraCour to obtain licenses for additional viral diseases as necessary. However, there can be no assurance that TheraCour will agree to license these materials to the Company, or to do so on terms that are favorable to the Company.

The total market size of drugs for the programs in which we already have lead drug candidates are estimated to be over \$40B in 2013. If we are successful in developing an oral anti-influenza drug that has a significant effectiveness in combatting influenza in humans, we believe that this market size will be substantially greater. It is well known in the medical field that when an effective drug is introduced against a disease, the total market size related to that disease expands significantly, usually into billions of dollars to tens of billions, depending upon the prevalence of the disease and other factors.

Our product development programs can be roughly divided into three sectors: (1) Commercially Important Diseases, (2) Neglected Tropical Diseases (NTD's) and Biosecurity/Biodefense, and (3) Advanced Technologies.

The commercially important diseases tend to have large market sizes, and are, therefore, attractive targets for collaborations with smaller pharmaceutical companies such as NanoViricides, Inc.

We are also pursuing licensing opportunities for our commercial drug programs. Historically, major pharmaceutical companies have licensed highly innovative drugs only after human clinical studies have established the value of the drug. In recent years, major pharmaceutical companies have entered into very early stage agreements, as early as screening and discovery level, with other pharmaceutical companies. We cannot, however, predict to what extent major pharmaceutical companies will be interested in engaging in early stage collaborations with us to develop our nanoviricide drugs.

We have initiated a Biosecurity/Biodefense program based on the US Government's commitment to Biosecurity. We are performing these developments strictly in various government and institutional collaborations to minimize development costs to us. In addition, we are pursuing grant and contract opportunities in this area to finance the drug development activities. The US Government is virtually the only source of revenue for our Biosecurity/Biodefense programs. Although we believe that we have demonstrated significant successes in this area, we do not intend to develop drugs in this area without continued government funding and assistance.

Our NTD programs were initiated because of the Company's commitment to social responsibility. As a Company led by medical professionals and committed scientists, we believe that these programs could make a substantial impact on the quality of worldwide healthcare. The Company believes its nanoviricide technology enables development of highly effective drug candidates against various diseases, at less effort and expense than traditional drug development. We have taken advantage of various government and institutional collaborations to perform drug development activities in the NTD area at a minimal cost. In addition, our R&D on NTD's also indirectly benefits our drug development for the commercially important diseases.

The NTD's have very high incidence rates worldwide. Most of the NTD infections occur in underdeveloped countries. As such, NTD's have traditionally been assigned low market sizes by market analysts. With the economic prosperity of India, China, Brazil, Russia, and other emerging world economies (the BRIC block), the economic situation relative to healthcare is also changing dramatically. Further, there are significant US government programs designed to promote the development of drugs against various NTD's, including the "priority voucher" program of the US FDA, which may have commercial value. In addition, there are several charitable foundations that are deeply involved in the NTD area in various roles, although primarily in improving access to healthcare.

### **Commercially High Priority Drug Development Programs**

To date, the Company has developed drug candidates against five virus types/disease areas with strong commercial prospects. These include Influenza, HIV, viral diseases of the external eye, Herpes Cold Sores and Genital Herpes, and Dengue viruses. The market size for HIV is estimated to be \$21 billion in 2013. The market for influenza drugs is estimated at about \$7 billion. The eye drops topical viricide market size is estimated to be in the billions of dollars. In addition, the herpes cold sores and genital herpes market size is in several billion dollars. The market for Dengue is also estimated to be in the billions of dollars because of the large extent of population exposed worldwide to the possibility of severe dengue disease.

### **One Influenza Drug Against All Influenzas: “H1N1 Swine Flu”, Common Influenzas, High Path Avian Influenzas, Bird Flu, Epidemic and Pandemic Influenzas**

Our FluCide<sup>(TM)</sup> program lead drug candidates, both the Injectable FluCide, and the Oral FluCide, have shown efficacies in animals that far exceed that of known drugs such as Oseltamivir (Tamiflu®, Roche) against common influenza in an animal model. Previously, we had planned on developing different drugs for different types of influenza infections based on severity. However, we have now consolidated our strategy to develop broadly active, yet highly effective, pan-influenza FluCide drugs. This became feasible because of the significant improvements in efficacy that we were able to achieve in optimizing our FluCide drug candidates. Both our Injectable and Oral FluCide are expected to be highly active against substantially all influenza strains, including highly pathogenic strains such as H5N1, the novel H1N1/2009 Mexico/California “Swine Flu” epidemic strain, H3N2, H7N, and H9N among others. We are currently developing a single drug for all influenza strains, whether pandemic, epidemic, seasonal, novel, emerging, human, swine, or avian. We are developing an orally available form of FluCide for out-patients. In addition, we are developing a sterile concentrated solution that is suitable for “piggy-back” infusion for the treatment of hospitalized patients with influenza or influenza-like-illness. We have declared a clinical candidate for influenza.

Recently, with additional SAR (structure-activity-relationship) studies, we have been able to develop influenza virus binding ligands that are expected to be superior to the ones we employed previously. The new ligands are designed to be closer mimics of the sialic acid receptors (than the previously employed ones), yet capable of binding to influenza virus hemagglutinin (and neuraminidase) proteins that use either the “avian” or the “human” types of sialic acid receptors. Pigs are known to be a “mixing vessel” species, exhibiting both avian and human types of sialic acid receptors, and thereby re-assortment (mixing) of genetic material from influenza strains, subtypes, or types, with different host specificities can occur readily in pigs. We are actively seeking partnerships, collaborations and government funding for our anti-influenza drug program.

In September 2012, we demonstrated oral efficacy of our anti-Influenza drug candidates against two different viruses namely H1N1 and H3N2. With these developments, the Company now intends to develop an oral influenza drug for out-patients. In addition, the Company intends to continue its injectable drug development as “piggy-back” infusion

solution for hospitalized patients.

### **Viral Diseases of the Eye: Viral Conjunctivitis, Viral Keratitis – Eye Drops**

We are developing a nanoviricide against adenoviral Epidemic Kerato-Conjunctivitis (EKC). EKC is a severe disease of the eye which in some people causes long term or permanent blurred vision. In an animal study, our EKCCide™ lead candidate was shown to rapidly resolve the clinical signs of the disease, when treatment was started after infection had set in. The clinical success included demonstration that no SEI's (immunoprecipitates) were formed in treated animals, as opposed to control group. SEI's are known to be the cause of blurred vision. There are currently no approved drugs available against EKC, and it is an active field of drug development research. There are about 2.5 million cases of EKC annually in the USA alone.

The Company is not aware of any animal studies of anti-EKC drug candidates that have demonstrated resolution of clinical disease. Based on these successful results, we expanded our program to develop a single broad-spectrum nanoviricide treatment effective against most of the viruses causing external eye diseases, including viral conjunctivitis and viral keratitis. A large majority of external eye viral infections are caused by adenoviruses or herpes simplex viruses (mainly HSV-1).

We have now successfully developed drug candidates that are effective against both adenoviruses and against HSV-1, viruses that cause most of the viral diseases of the external eye. Additional animal testing against HSV-1 infection of the eye is expected to be commissioned in the coming year.

HSV and some adenoviruses cause most of the cases of keratitis, a serious infection of the cornea (approximately 250,000 US cases/year). Importantly, HSV infection can lead to corneal scarring that may necessitate corneal transplantation. In addition, some adenoviruses cause a majority of conjunctivitis cases ("Pink eye"). The remaining cases of conjunctivitis are caused by bacteria and are treatable with topical antibiotics. Currently there are no effective treatments for viral diseases of the exterior portion of the eye.

The nanoviricide eye drug candidate is formulated as simple eye drops.

The total market for viral conjunctivitis and keratitis is estimated to be in the billions of dollars. The incidence of severe herpes keratitis is estimated to be 250,000 cases per year in the USA. In Japan, where EKC is a reportable disease, it is estimated that there are at least one million cases per year. The number of cases of non-specific conjunctivitis (pink eye) is considered to be far greater, possibly into the tens of millions in the US and hundreds of millions worldwide.

### **Herpes Cold Sores and Genital Herpes**

As a result of the expansion to include HSV for our eye drug candidate, we also undertook a drug development program for a nanoviricide against the herpes simplex viruses, HSV-1 and HSV-2. These viruses cause herpes cold sores or oral lesions and skin lesions, and genital herpes sores. Drugs such as acyclovir are available for HSV. However, the virus, once infection takes place, travels into the closest neural ganglia and “hides” there, causing recurrent outbreaks.

We are currently developing an anti-HSV nanoviricide skin cream formulation for direct application to the lesions. We believe that the distinctly different mechanism of nanoviricide action should result in a complimentary effect with the existing drugs. We believe that direct attack on the HSV particle by the nanoviricide would result in less reinfection of human cells, and may possibly lead to a reduction in the amount of hidden virus. This may lead to reduced rates of recurrence.

We have previously successfully tested certain anti-HSV drug candidates in a cell culture model for effectiveness against Herpes Simplex Virus (HSV-1) infection. This testing was conducted by TheVac, LLC laboratories at the Louisiana Emerging Technology Center located within the Louisiana State University (LSU) campus in collaboration with the LSU School of Veterinary Medicine. Four different nanoviricides showed greater than 10,000-fold (>99.99% or 4-logs) reduction in virus quantity compared to untreated controls in a cell culture assay employing the LSU proprietary green-fluorescent-protein-tagged (GFP) modified HSV-1 McKrae strain.

These nanoviricide drug candidates are designed to act against all herpes simplex virus strains, including HSV-1 and HSV-2. The Company has commissioned additional in vitro studies to confirm the results. Animal studies have also been scheduled.

On May 13, 2010, the Company announced that it had entered into a Research and Development Agreement with Professor Ken Rosenthal Lab at NEOUCOM (now NEOMED). Professor Rosenthal has developed in vitro or cell culture based tests for identifying the effectiveness of antiviral agents against HSV. He has also developed a skin lesion mouse model for HSV infection. Dr. Rosenthal has been involved in the evaluation of HSV vaccines as well as anti-HSV drugs. His laboratory has developed an improved mouse model of skin-infection with HSV to follow the disease progression. This model has been shown to provide highly uniform and reproducible results. A uniform disease pattern including onset of lesions and further progression to zosteriform lesions is observed in all animals in this model. This uniformity makes it an ideal model for comparative testing of various drug candidates. Dr. Rosenthal is a professor of microbiology, immunology and biochemistry at Northeastern Ohio Universities Colleges of Medicine and Pharmacy (NEOUCOM). He is a leading researcher in the field of herpes viruses. His research interests encompass several aspects of how herpes simplex virus (HSV) interacts with the host to cause disease. His research has addressed how HSV infects skin cells and examined viral properties that facilitate its virulence and ability to cause encephalitis. In addition, Dr. Rosenthal has also been studying a viral protein that makes the HSV more virulent by helping the virus to take over the cellular machinery to make copies of its various parts, assemble these parts together into virus particles and release the virus to infect other cells. He is also researching how the human host immune response works against HSV for the development of protective and therapeutic vaccines.

On August 16, 2010, the Company reported that its anti-Herpes drug candidates demonstrated significant efficacy in the recently completed cell culture studies in Dr. Rosenthal Lab at NEOUCOM (now NEOMED). Several of the anti-Herpes nanoviricides® demonstrated a dose-dependent maximal inhibition of Herpes virus infectivity in a cell culture model. Almost complete inhibition of the virus production was observed at clinically usable concentrations. These studies employed the H129 strain of herpes simplex virus type 1 (HSV-1). H129 is an encephalitic strain that closely resembles a clinical isolate; it is known to be more virulent than classic HSV-1 laboratory strains. The H129 strain will be used in subsequent animal testing of nanoviricides.

We now have evidence that our anti-HSV drug candidates were highly effective against two different strains of HSV-1. We believe that these drug candidates should be effective against most if not all of HSV-1 strains. We also plan to test these drug candidates for effectiveness against HSV-2.

Herpes simplex virus (HSV) causes “cold sores” or “fever blisters”, the incidence of which is second only to the common cold (100 million recurrences annually in the US alone). In addition, genital herpes prevalence is 67 million infected individuals in the US alone. This represents 20% of the US population infected with symptomatic, recurrent disease. It is also believed that a large fraction of infected individuals remain asymptomatic. Seroprevalence (people with antibodies) in general French population is about 67% for HSV-1 and 17% for HSV-2. It is estimated that worldwide incidence and infection rates are very similar to these high proportions of infection prevalence.

Existing therapies for herpes virus infections include acyclovir and drugs chemically related to it (e.g. gancyclovir, valcyclovir, others). These drugs, nucleoside analogs, act by inhibiting viral DNA synthesis. However, there is known drug toxicity due to interference with human metabolism. Currently, there is no cure for herpes infection.

Nanoviricides are designed to act by a novel and distinctly different mechanism compared to existing drugs. Nanoviricides are designed to mimic the human cell surface to which the virus binds. Our results suggest that a nanoviricide could become a highly sought after drug against HSV.

## **HIV**

Our very first animal studies in the standard SCID-hu mice against HIV-I have demonstrated that our primary nanoviricide drug candidate, HIVCide, as well as several other nanoviricide drug candidates were found to be superior to the three-drug oral cocktail (HAART) that is the current standard of care.

We have executed a Master Service Agreement (MSA) with Southern Research Institute, Infectious Diseases Division, Frederick, MD (SRI-F) to conduct these studies. SRI-F is a well-established Contract Research Organization (CRO) that has developed, conducted, and published in scientific journals on standardized study protocols for various mechanisms of anti-HIV action, including microbicides, antibodies, and small chemical therapeutics. We are also planning additional animal studies of these drug candidates. We are also planning additional animal model studies of the HIVCide<sup>(TM)</sup> lead drug candidate.

We reported that a subset of the anti-HIV nanoviricides tested in cell culture models at Southern Research had very similar activity against two distinctly different isolates of HIV-1, viz. Ba-L and IIB. HIV-1 Ba-L is CCR5-tropic (uses CD4 and CCR5) whereas HIV-1 IIB is CXCR4-tropic (uses CD4 and CXCR4 on host cells). The Company had designed the ligands using the known structures of interaction of gp120 of several HIV-1 strains with the CD4 human cell receptor for HIV.

We designed the anti-HIV nanoviricides using rational drug design principles. The ligands we have designed in the case of HIV-1 are thought to be broadly neutralizing. In-silico modeling indicates that our ligands dock to the conserved CD4 binding site of gp120 of HIV-1. We have even observed successful docking of some of our ligands with gp120 of the HIV-1 JRFL strain which is thought to be resistant to HAART.

We have designed additional novel ligands to attack the HIV gp120 at its CD4 binding sites. In order to discriminate the comparative effectiveness of different nanoviricides in the humanized mouse model, we synthesized nanoviricides

with reduced ligand density than in our previous study. A new study revealed that one of these nanoviricides was as effective as the three drug HAART cocktail (AZT, 3TC and Efavirenz) in the humanized mouse model. What is more, this drug kept the viral load at a sustained low level until at least 28 days after last drug dose. This sustained drug effect is a very important benefit especially for HIV/AIDS patients. We believe that we may have a “functional cure” for HIV/AIDS.

Resistance to HAART eventually leads to AIDS. It is possible that HIVCide can be used in addition to HAART to obtain even stronger beneficial effects, resulting in a “functional cure” of HIV.

The HIV genome integrates into certain human cells that go into hiding or dormancy for several years.

While dormant, the HIV genome does not produce HIV virus particles or HIV proteins to any significant extent and are thought to remain unaffected by current anti-HIV drugs. The current standard treatment results in very low levels of HIV viremia, but the immune cells (CD4+ T cells and CD8+T cells) count eventually begins decreasing at a slow rate. The HAART therapy must be continued for the life of the patient. A more effective therapy could result in complete loss of HIV from the blood stream. This may eliminate the slow loss of healthy immune cell populations, and allow immune system function to return to normal. Patients may then enjoy a normal life without further daily treatment, until an episode occurs which mobilizes the “sleeping” cells containing the HIV genome. Such a therapy would be called a “functional cure” against HIV. A total cure of HIV would require elimination of the dormant cell pool containing the HIV genome. Research in the field of reactivating the dormant pool of HIV infected cells is encouraging. If these cells can be reactivated, and simulONT STYLE="font-family:Times New Roman" SIZE="2">Ø

issuance of new or updated research reports by securities or industry analysts;

Ø fluctuations in the valuation of companies perceived by investors to be comparable to us;

Ø litigation involving us, our general industry or both;

Ø disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;

Ø changes in existing laws, regulations and policies applicable to our business and products, including the Renewable Fuel Standard ( RFS ) program, and the adoption of or failure to adopt carbon emissions regulation;

Ø announcements or expectations of additional financing efforts;

Ø sales of our common stock by us or our stockholders;

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Ø share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;

Ø general market conditions in our industry; and

Ø general economic and market conditions, including the recent financial crisis.

Furthermore, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations often have been unrelated or disproportionate to the operating performance of those companies. These broad market and industry fluctuations, as well as general economic, political and market conditions such as recessions, interest rate changes or international currency fluctuations, may negatively impact the market price of shares of our common stock, regardless of our operating performance, and cause the value of your investment to decline. Because the notes are convertible into our common stock, volatility or depressed prices of our common stock could have an adverse effect on the trading price of the notes. Holders who receive common stock upon conversion of the notes also will be subject to the risk of volatility and depressed prices of our common stock. In addition, the existence of the notes may encourage short selling in our common stock by market participants because the conversion of the notes could depress the price of our common stock.

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### **Risk factors**

Additionally, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

The price of our common stock also could be affected by possible sales of common stock by investors who view the notes as a more attractive means of equity participation in us and by hedging or arbitrage activity involving our common stock that we expect to develop as a result of the issuance of the notes. The hedging or arbitrage could, in turn, affect the trading prices of the notes, or any common stock that holders receive upon conversion of the notes.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. Our three largest stockholders as of June 15, 2012 beneficially own, collectively, approximately 46% of our outstanding common stock. If one or more of them were to sell a substantial portion of the shares they hold, it could cause our stock price to decline.

In addition, as of June 15, 2012, there were 3,462,295 shares subject to outstanding options that are or will become eligible for sale in the public market to the extent permitted by any applicable vesting requirements and Rules 144 and 701 under the Securities Act. Moreover, certain holders of our outstanding common stock (including shares of our common stock issuable upon the exercise of outstanding warrants) have rights, subject to some conditions, to require us to file registration statements covering their shares and to include their shares in registration statements that we may file for ourselves or other stockholders.

We registered 6,751,194 shares of common stock, which are reserved for issuance under our stock incentive plans and our Employee Stock Purchase Plan ( ESPP ). These shares can be freely sold in the public market upon issuance and once vested.

### **We may not have the ability to pay interest on the notes or to repurchase or redeem the notes.**

The notes bear interest at a rate of 7.5% per year, payable in cash semi-annually in arrears on January 1 and July 1 of each year, commencing in 2013. If a fundamental change occurs, holders of the notes may require us to repurchase, for cash, all or a portion of their notes. See Description of notes Repurchase at the Option of the Holder Upon a Fundamental Change and Description of notes Repurchase of Notes by the Company at the Option of the Holder. If we elect to redeem the notes prior to their maturity, the redemption price of any notes redeemed by us will be paid for in cash. See Description of notes Redemption of Notes at the Company's Option. Our ability to pay the interest on the notes, to repurchase or redeem the notes, to refinance our indebtedness and to fund working capital needs and planned capital expenditures depends on our ability to generate cash flow in the future. To some extent, this is subject to general economic, financial, competitive, legislative and regulatory factors and other factors that are beyond our control. We cannot assure you that we will continue to maintain sufficient cash reserves or that our business will continue to generate cash flow from operations at levels sufficient to permit us to pay the interest on the notes or to repurchase or redeem the notes, or that our cash needs will not increase. In addition, any such repurchase or redemption of the notes, even if such action would be in our best interests, may result in a default under the agreements governing our current indebtedness with TriplePoint unless we are able to obtain TriplePoint's consent prior to the taking of such action.

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### **Risk factors**

Our failure to repurchase tendered notes at a time when the repurchase is required by the indenture would constitute a default under the notes and would permit holders of the notes to accelerate our obligations under the notes. Such default may also lead to a default under the agreements governing any of our current and future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay such indebtedness and repurchase the notes or make cash payments upon conversions thereof.

If we are unable to generate sufficient cash flow from operations in the future to service our indebtedness and meet our other needs, we may have to refinance all or a portion of our indebtedness, obtain additional financing, reduce expenditures or sell assets that we deem necessary to our business. We cannot assure you that any of these measures would be possible or that any additional financing could be obtained on favorable terms, or at all. The inability to obtain additional financing on commercially reasonable terms could have a material adverse effect on our financial condition and on our ability to meet our obligations to you under the notes.

#### **We may not be permitted, by the agreements governing our secured indebtedness, to repurchase the notes offered hereby.**

If a fundamental change occurs, the holders of the notes may require us to repurchase all or a portion of their notes for cash at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the repurchase date. However, the agreements governing our secured indebtedness with TriplePoint prohibit us from paying, repurchasing or redeeming the notes or any amounts payable in connection with a fundamental change or at our option. In the event that a fundamental change occurs at a time when we are prohibited from repurchasing the notes, we would need to seek the consent of TriplePoint to repurchase the notes from the holders or we would otherwise be risking an event of default under our agreement with TriplePoint. If we were to not obtain such a consent, compliance with the terms of the notes would trigger an event of default under our indebtedness with TriplePoint.

#### **We have made only limited covenants in the indenture for the notes, and these limited covenants may not protect the value of your investment.**

The indenture for the notes does not:

- Ø require us to maintain any financial ratios or specific levels of net worth, revenues, income, cash flows or liquidity and, accordingly, does not protect holders of the notes in the event that we experience significant adverse changes in our financial condition or results of operations;
- Ø limit our subsidiaries' ability to incur indebtedness that would effectively rank senior to the notes;
- Ø limit our ability to incur secured indebtedness that would effectively rank senior to the notes or indebtedness that is equal in right of payment to the notes;
- Ø restrict our subsidiaries' ability to issue securities that would be senior to the common stock of our subsidiaries held by us;
- Ø restrict our ability to repurchase our securities;

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- Ø restrict our ability to pledge our assets or those of our subsidiaries; or
  
- Ø restrict our ability to make investments or to pay dividends or make other payments in respect of our common stock or other securities ranking junior to the notes.

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### **Risk factors**

Furthermore, the indenture for the notes contains only limited protections in the event of a change in control. We could engage in many types of transactions, such as acquisitions, refinancings or recapitalizations, that could substantially affect our capital structure and the value of the notes and our common stock but would not constitute a fundamental change that permits holders to require us to repurchase their notes. For these reasons, you should not consider the covenants in the indenture or the repurchase feature of the notes as a significant factor in evaluating whether to invest in the notes.

### **Future issuances of our common stock or instruments convertible into our common stock, including in connection with conversions of notes, and hedging activities by holders of the notes may materially and adversely affect the price of our common stock and the notes.**

Concurrently with this offering of notes, we are offering 12,500,000 shares of our common stock (or a total of 14,375,000 shares if the underwriters for the concurrent common stock offering exercise in full their option to purchase, within 30 days from the date of the prospectus supplement for such offering, up to an additional 1,875,000 shares of common stock) pursuant to a separate prospectus supplement. Other than lock-up provisions that apply for the first 90 days after the date of this prospectus supplement, we are not restricted from issuing additional shares of our common stock or other instruments convertible into our common stock. If we issue additional shares of common stock or instruments convertible into common stock, it may materially and adversely affect the price of the common stock and, in turn, the price of the notes. In addition, the conversion of some or all of the notes may dilute the ownership interests of existing stockholders, and any sales in the public market of any of our common stock issuable upon such conversion could adversely affect prevailing market prices of the common stock. Moreover, the anticipated conversion of the notes into shares of our common stock could depress the trading price of our common stock.

The price of our common stock also could be affected by possible sales of our common stock by investors who view the notes as a more attractive means of equity participation in our company and by hedging or arbitrage trading activity that we expect to develop involving our common stock by holders of the notes. The hedging or arbitrage could, in turn, affect the trading price of the notes, or any common stock that holders receive upon conversion of the notes.

### **We may not be permitted, by the agreements governing our secured indebtedness, to pay any coupon make-whole payment upon conversion in cash, requiring us to issue shares for such amounts, which could result in significant dilution to our stockholders.**

If a holder elects to convert some or all of their notes on or after January 1, 2013 but prior to July 1, 2017, in addition to the consideration received as described under Description of notes Conversion Rights, such holder will receive a coupon make-whole payment for the notes being converted. We have the option to issue our common stock to any converting holder in lieu of making the coupon make-whole payment in cash. If we elect to issue our common stock for such payment, then the stock will be valued at 90% of the simple average of the daily volume weighted average prices of our common stock for the 10 trading days ending on and including the trading day immediately preceding the conversion date. Given that the agreements governing our secured indebtedness with TriplePoint prohibit us from paying, repurchasing or redeeming the notes or making cash payments in respect of the coupon make-whole amount upon a conversion, we may be unable to make such payment in cash. If we elect to issue our common stock for such payment, this may cause significant dilution to our existing stockholders.

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### **Risk factors**

#### **Holders of notes will not be entitled to any rights with respect to our common stock, but will be subject to all changes made with respect to such rights.**

Holders of notes will not be entitled to any rights with respect to our common stock (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock), but holders of notes will be subject to all changes affecting our common stock. For example, if an amendment is proposed to our certificate of incorporation or bylaws requiring stockholder approval and the record date for determining the stockholders of record entitled to vote on the amendment occurs prior to a holder's conversion of its notes, such holder will not be entitled to vote on the amendment, although such holder will nevertheless be subject to any changes affecting our common stock that result from such amendment.

#### **We have broad discretion in the use of the net proceeds from this offering and the concurrent common stock offering, if any, and may not use them effectively, which could cause the value of your investment to decline.**

Although we currently intend to use the net proceeds from this offering and the concurrent common stock offering, if any, in the manner described in "Use of proceeds" elsewhere in this prospectus supplement, we will have broad discretion in the application of the net proceeds of this offering and the concurrent common stock offering, if any. You will not have the opportunity to influence our decisions on how to use our net proceeds from this offering or the concurrent common stock offering, if any. Our failure to apply these net proceeds effectively could affect our ability to continue to develop and sell our products and grow our business, which could cause the value of your investment to decline.

#### **The adjustment to the conversion rate for notes converted in connection with a make-whole fundamental change may not adequately compensate you for the lost option value of your notes as a result of such transaction.**

If a make-whole fundamental change occurs prior to maturity, under certain circumstances, we will increase the conversion rate by a number of additional shares of our common stock for notes converted in connection with such make-whole fundamental change. The increase in the conversion rate will be determined based on the date on which the specified corporate transaction constituting the make-whole fundamental change becomes effective and the price paid (or deemed paid) per share of our common stock in such transaction, as described below under "Description of notes - Adjustment to Conversion Rate Upon Conversion Upon Make-Whole Fundamental Changes." The adjustment to the conversion rate for notes converted in connection with a make-whole fundamental change may not adequately compensate you for any lost value of your notes as a result of such transaction. In addition, if the price of our common stock in the transaction is greater than \$20.00 per share or less than \$4.95 per share (in each case, subject to adjustment), no adjustment will be made to the conversion rate. Moreover, in no event will the total number of shares of common stock issuable upon conversion as a result of this adjustment exceed 202.0202 per \$1,000 principal amount of notes, subject to adjustments in the same manner as the conversion rate as set forth under "Description of notes - Conversion Rate Adjustments."

Our obligation to increase the conversion rate upon the occurrence of a make-whole fundamental change could be considered a penalty, in which case the enforceability thereof would be subject to general principles of reasonableness of economic remedies.

#### **The conversion rate of the notes may not be adjusted for all dilutive events.**

The conversion rate of the notes is subject to adjustment for certain events, including, but not limited to, the issuance of stock dividends on our common stock, the issuance of certain rights, options or warrants,

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### **Risk factors**

distributions of capital stock, indebtedness, or assets, cash dividends and certain issuer tender or exchange offers, as described under Description of notes Conversion Rate Adjustments. However, the conversion rate will not be adjusted for other events, such as a third-party tender or exchange offer or an issuance of common stock or securities convertible or exercisable into common stock, that may adversely affect the trading price of the notes or the consideration issued upon conversion thereof. An event that adversely affects the value of the notes may occur, and that event may not result in an adjustment to the conversion rate.

#### **Some significant restructuring transactions may not constitute a fundamental change, in which case we would not be obligated to offer to repurchase the notes.**

Upon the occurrence of a fundamental change, holders have the right to require us to repurchase their notes. However, the fundamental change provisions will not afford protection to holders of notes in the event of other transactions that could adversely affect the notes. For example, transactions such as leveraged recapitalizations, refinancings, restructurings or acquisitions initiated by us may not constitute a fundamental change requiring us to repurchase the notes. In the event of any such transaction, holders would not have the right to require us to repurchase their notes, even though each of these transactions could increase the amount of our indebtedness or otherwise adversely affect our capital structure or any credit ratings, thereby adversely affecting the value of the notes.

#### **Holders would not be able to accelerate the maturity of the notes if we fail to make our SEC filings in a timely manner.**

The indenture governing the notes will require us to furnish our SEC filings to the trustee no more than 15 days after the date on which we would have been required to file them with the SEC. The indenture also requires us to comply with certain filing requirements as set forth in the Trust Indenture Act of 1939, as amended (the Trust Indenture Act ). However, the indenture does not require us to file any such reports on a timely basis with the SEC. Accordingly, holders of notes may not be able to accelerate the maturity of the notes if we fail to make our SEC filings in a timely manner. See Description of notes Reports.

#### **We cannot assure you that an active trading market will develop for the notes. You may be unable to sell your notes at the price you desire or at all.**

There is no existing trading market for the notes. We do not intend to apply for listing of the notes on any securities exchange or to arrange for quotation on any interdealer quotation system. We have been informed by the underwriters that they intend to make a market in the notes after the offering is completed. However, the underwriters may cease their market-making in their sole discretion at any time without notice. In addition, the liquidity of the trading market in the notes, and the market price quoted for these notes, may be adversely affected by, among other things:

- Ø changes in the overall market for debt securities;
- Ø changes in our financial performance or prospects;
- Ø the prospects for companies in our industry generally;
- Ø the number of holders of the notes;
- Ø the interest of securities dealers in making a market for the notes;

Ø the time remaining to the maturity of the notes;

Ø the outstanding amount of the notes;

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### **Risk factors**

Ø the market price and volatility of our common stock; and

Ø prevailing interest rates.

Historically, the market for convertible debt has been subject to disruptions that have caused volatility in prices. It is possible that the market for the notes will be subject to disruptions that may have a negative effect on you, regardless of our operating results, financial performance or prospects.

As a result, we cannot assure you that an active trading market will develop for the notes. If an active trading market does not develop or is not maintained, the market price and liquidity of the notes may be adversely affected. In that case, you may not be able to sell your notes at a particular time or at a favorable price.

#### **Any adverse rating of the notes may cause their trading price to fall.**

We do not intend to seek a rating on the notes. However, if a rating service were to rate the notes and if such rating service were to lower its rating on the notes below the rating initially assigned to the notes or otherwise announce its intention to put the notes on credit watch, the trading price of the notes could decline.

#### **Developments in the convertible debt markets may adversely affect the market value of the notes.**

We expect that many investors in, and potential purchasers of, the notes will employ, or seek to employ, a convertible arbitrage strategy with respect to the notes. Investors that employ a convertible arbitrage strategy with respect to convertible debt instruments typically implement that strategy by selling short the common stock underlying the notes and dynamically adjusting their short position while they hold the notes. As a result, any specific rules regulating short selling of securities or other governmental action that interferes with the ability of market participants to effect short sales in our common stock could adversely affect the ability of investors in, or potential purchasers of, the notes to conduct the convertible arbitrage strategy that we believe they will employ, or seek to employ, with respect to the notes. This could, in turn, adversely affect the market price and liquidity of the notes.

#### **You may be subject to tax if we make or fail to make certain adjustments to the conversion rate of the notes even if you do not receive a corresponding cash distribution.**

The conversion rate of the notes is subject to adjustment in certain circumstances, including the payment of cash dividends. See Description of notes Conversion Rate Adjustments. If the conversion rate is adjusted as a result of a distribution that is taxable to our common stockholders, such as a cash dividend, you may be deemed to have received a dividend subject to U.S. federal income tax even if you have not received any cash. In addition, a failure to adjust (or to adequately adjust) the conversion rate after an event that increases your proportionate interest in our assets and earnings could be treated as a deemed taxable dividend to you. If a make-whole fundamental change occurs prior to the maturity date of the notes, under some circumstances, we will increase the conversion rate for notes converted in connection with the make-whole fundamental change. Such increase may also be treated as a distribution subject to U.S. federal income tax as a dividend. See Material United States federal income tax considerations. If you are a Non-U.S. Holder (as defined in Material United States federal income tax considerations ), any deemed dividend would generally be subject to U.S. federal withholding tax at a 30% rate, or such lower rate as may be specified by an applicable treaty, which may be set off against subsequent payments of cash and common stock made on the notes (or in certain circumstances, against any payments on the



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**Risk factors**

common stock) to satisfy any applicable withholding tax. See Material United States federal income tax considerations.

**Provisions in the indenture for the notes may deter or prevent a business combination that may be favorable to you.**

If a fundamental change occurs prior to the maturity date of the notes, holders of the notes will have the right, at their option, to require us to repurchase all or a portion of their notes. In addition, if a fundamental change occurs prior to the maturity date of notes, we will in some cases be required to increase the conversion rate for a holder that elects to convert its notes in connection with such fundamental change. In addition, the indenture for the notes prohibits us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the notes. These and other provisions could prevent or deter a third party from acquiring us, even where the acquisition could be beneficial to you.

**The notes will initially be held in book-entry form only and, therefore, you must rely on the procedures and the relevant clearing system to exercise your rights and remedies.**

Unless and until certificated notes are issued in exchange for book-entry interests in the notes, owners of the book-entry interests will not be considered owners or holders of notes. Instead, DTC, or its nominee, will be the sole holder of the notes. Payments of principal, interest and other amounts owing on or in respect of the notes in global form will be made to the paying agent, which will make payments to DTC. Thereafter, such payments will be credited to DTC participants' accounts that hold book-entry interests in the notes in global form and credited by such participants to indirect participants. Unlike holders of the notes themselves, owners of book-entry interests will not have the direct right to act upon our solicitations for consents or requests for waivers or other actions from holders of the notes. Instead, if you own a book-entry interest, you will be permitted to act only to the extent you have received appropriate proxies to do so from DTC or, if applicable, a participant. We cannot assure you that procedures implemented for the granting of such proxies will be sufficient to enable you to act upon any requested actions on a timely basis.

**We are subject to anti-takeover provisions in our amended and restated certificate of incorporation and amended and restated bylaws and under Delaware law that could delay or prevent an acquisition of the Company, even if the acquisition would be beneficial to our stockholders.**

Provisions in our amended and restated certificate of incorporation and our amended and restated bylaws may delay or prevent an acquisition of us. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws provide for a board of directors that is divided into three classes with staggered three-year terms, provide that all stockholder action must be effected at a duly called meeting of the stockholders and not by a consent in writing, and further provide that only our board of directors may call a special meeting of the stockholders. These provisions may also frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, who are responsible for appointing the members of our management team. Furthermore, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits, with some exceptions, stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. Finally, our charter documents establish advance notice requirements for nominations for election to our board of directors and for proposing matters that can be acted upon at stockholder meetings. Although we believe these provisions together

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### **Risk factors**

provide an opportunity to receive higher bids by requiring potential acquirers to negotiate with our board of directors, they would apply even if an offer to acquire the Company may be considered beneficial by some stockholders.

#### **Concentration of ownership among our existing officers, directors and principal stockholders may prevent other stockholders from influencing significant corporate decisions and depress our stock price.**

Our officers, directors and existing stockholders who held at least 5% of our common stock as of June 15, 2012 together control approximately 73% of our outstanding common stock, with a single stockholder (Khosla Ventures I, L.P. and its affiliates) controlling approximately 27% of our outstanding common stock. If these officers, directors and principal stockholders or a group of our principal stockholders act together, they will be able to exert a significant degree of influence over our management and affairs and control matters requiring stockholder approval, including the election of directors and approval of mergers or other business combination transactions. The interests of this concentration of ownership may not always coincide with our interests or the interests of other stockholders. For instance, officers, directors and principal stockholders, acting together, could cause us to enter into transactions or agreements that we would not otherwise consider. Similarly, this concentration of ownership may have the effect of delaying or preventing a change in control of the Company otherwise favored by our other stockholders. This concentration of ownership could depress our stock price.

#### **If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline. The trading market for our common stock will be influenced by the research and reports that securities or industry analysts publish about us or our business.**

We do not have any control over these analysts. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock, our stock price would likely decline which in turn would likely cause a decline in the value of the notes. If one or more of these analysts cease coverage of the Company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price and note price to decline or the trading volume of our common stock to decline.

#### **We do not anticipate paying cash dividends, and accordingly, stockholders must rely on stock appreciation for any return on their investment.**

Under the terms of our amended and restated Agri-Energy Loan Agreement with TriplePoint, subject to certain limited exceptions, Agri-Energy is only permitted to pay dividends if the following conditions are satisfied: (i) the retrofit of the Agri-Energy Facility is complete and the facility is producing commercial volumes of isobutanol, (ii) its net worth is greater than or equal to \$10.0 million, and (iii) no event of default has occurred and is continuing under the agreement. In the event that this offering of notes is consummated, the amended and restated Agri-Energy Loan Agreement will be further amended to permit Agri-Energy to make dividends and distributions to Gevo, Inc. solely for the purpose of paying regularly scheduled interest payments on the notes. Accordingly, even if we decide to pay cash dividends in the future, we may not be able to access cash generated by Agri-Energy if amounts are then outstanding pursuant to the amended and restated Agri-Energy Loan Agreement. We have never paid cash dividends on our common stock and we do not expect to pay cash dividends on our common stock at any time in the foreseeable future. The future payment of dividends directly depends upon our future earnings, capital requirements, financial requirements and other factors that our board of directors will consider.

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As a result, only appreciation of the price of our common stock, which may never occur, will provide a return to stockholders. Investors seeking cash dividends should not invest in our common stock.

### **CERTAIN RISKS RELATING TO OUR BUSINESS AND STRATEGY**

#### **We are a development stage company with a history of net losses, and we may not achieve or maintain profitability.**

We have incurred net losses since our inception, including losses of \$19.3 million, \$48.2 million, \$40.1 million and \$19.9 million in the three months ended March 31, 2012 and fiscal years ended December 31, 2011, 2010 and 2009, respectively. As of March 31, 2012, we had an accumulated deficit of \$153.9 million. We expect to incur losses and negative cash flow from operating activities for the foreseeable future. We are a development stage company and, to date, our revenues have been extremely limited and we have not generated significant revenues from the sale of isobutanol. Prior to September 2010, our revenues were primarily derived from government grants and cooperative agreements. From the completion of our acquisition of Agri-Energy in September 2010 until the commencement of our retrofit start-up operations in May 2012, we had generated revenue from the sale of ethanol and related products. Now that we have commenced start-up operations for the production of isobutanol, we do not expect to generate future revenues from the sale of ethanol at the Agri-Energy Facility. If our existing grants and cooperative agreements are canceled prior to the expected end dates or we are unable to obtain new grants and cooperative agreements, our revenues could be adversely affected. Furthermore, we expect to spend significant amounts on further development of our technology, acquiring or otherwise gaining access to ethanol plants and retrofitting them for isobutanol production, marketing, general and administrative expenses associated with our planned growth and management of operations as a public company. In addition, the cost of preparing, filing, prosecuting, maintaining and enforcing patent, trademark and other intellectual property rights and defending ourselves against claims by others that we may be violating their intellectual property rights may be significant.

In particular, over time, the costs of our litigation with Butamax Advanced Biofuels LLC (a joint venture between BP p.l.c. ( "BP" ) and E.I. du Pont de Nemours and Company, "Butamax" ) may become significant (as described further in our Annual Report on Form 10-K, as amended, and other reports that we have filed with the SEC). As a result, even if our revenues increase substantially, we expect that our expenses will exceed revenues for the foreseeable future. We do not expect to achieve profitability during the foreseeable future, and may never achieve it. If we fail to achieve profitability, or if the time required to achieve profitability is longer than we anticipate, we may not be able to continue our business. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

#### **Our retrofits of the Agri-Energy and Redfield Facilities will be our first commercial retrofits and, as a result, our production of isobutanol could be delayed or we could experience significant cost overruns in comparison to our current estimates.**

In September 2010, we acquired ownership of an ethanol production facility, the Agri-Energy Facility in Luverne, Minnesota, and in June 2011, we acquired access to a second ethanol production facility, the Redfield Facility in Redfield, South Dakota, pursuant to our joint venture with Redfield. We intend to retrofit both facilities to produce isobutanol. Cost overruns or other unexpected difficulties could cause the retrofits to cost more than we anticipate, which could increase our need for such funding. Such funds may not be available when we need them, on terms that are acceptable to us or at all, which could delay our initial commercial production of isobutanol. If additional funding is not available to us, or not available on terms acceptable to us, it could force us to use significantly more of our own funds than

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planned, limiting our ability to acquire access to or retrofit additional ethanol plants. Such a result could reduce the scope of our business plan and have an adverse effect on our results of operations.

**Our ability to compete may be adversely affected if we are unsuccessful in defending against any claims by competitors or others that we are infringing upon their intellectual property rights, such as if Butamax is successful in its lawsuits alleging that we are infringing its patents for the production of isobutanol using certain microbial host cells.**

The various bioindustrial markets in which we plan to operate are subject to frequent and extensive litigation regarding patents and other intellectual property rights. In addition, many companies in intellectual property-dependent industries, including the renewable energy industry, have employed intellectual property litigation as a means to gain an advantage over their competitors. As a result, we may be required to defend against claims of intellectual property infringement that may be asserted by our competitors against us and, if the outcome of any such litigation is adverse to us, it may affect our ability to compete effectively. Currently, we are defending against three lawsuits filed by Butamax alleging that we have infringed patents for certain recombinant microbial host cells that produce isobutanol and methods for the production of isobutanol using such host cells and a patent covering a modified *Pseudomonas* KARI enzyme. The litigation with Butamax is dynamic. We have filed complaints alleging infringement of certain of our patents by Butamax and we anticipate that additional patents involving the isobutanol production process that are issued to Butamax, its members or us will be involved in litigation. The trial for the earliest-filed Butamax litigation is currently scheduled for April 2013.

Our involvement in litigation, interferences, opposition proceedings or other intellectual property proceedings inside and outside of the U.S. may divert management time from focusing on business operations, could cause us to spend significant amounts of money and may have no guarantee of success. Any current and future intellectual property litigation also could force us to do one or more of the following:

- ∅ stop selling, incorporating, manufacturing or using our products that use the subject intellectual property;
- ∅ obtain from a third party asserting its intellectual property rights, a license to sell or use the relevant technology, which license may not be available on reasonable terms, or at all;
- ∅ redesign those products or processes, such as our process for producing isobutanol, that use any allegedly infringing or misappropriated technology, which may result in significant cost or delay to us, or which redesign could be technically infeasible; or
- ∅ pay damages, including the possibility of treble damages in a patent case if a court finds us to have willfully infringed certain intellectual property rights.

We are aware of a significant number of patents and patent applications relating to aspects of our technologies filed by, and issued to, third parties, including, but not limited to Butamax. We cannot assure you that we will ultimately prevail if any of this third-party intellectual property is asserted against us or that we will ultimately prevail in the patent infringement litigation with Butamax.

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**Following completion of its retrofit to isobutanol production, the Agri-Energy Facility will be our first commercial isobutanol production facility, and, as a result, our production of isobutanol could be delayed or we could experience significant cost overruns in comparison to our current estimates of production costs or be unable to produce planned quantities of isobutanol.**

In May 2012, we announced that we had commenced start-up operations for the retrofit of the Agri-Energy Facility to isobutanol production. We plan to commence commercial production of isobutanol at the Agri-Energy Facility by June 30, 2012. However, technical completion of the retrofit and the initial shipments of isobutanol from the Agri-Energy Facility are not expected until the third quarter of 2012 and we expect that production volumes during start-up operations will be lower than the projected nameplate capacity for isobutanol production at the facility. We project that the Agri-Energy Facility will be able to produce isobutanol at a run rate of approximately one million gallons per month by the end of 2012 and will reach full production capacity run rates by the end of 2013. However, we may encounter unexpected production challenges during the completion of the retrofit and the projected ramp up in production rates. Any such production challenges may prevent us from producing significant quantities of isobutanol or may significantly increase our cost to produce isobutanol.

While we have designed the retrofit of the Agri-Energy Facility to allow the capability to switch between isobutanol and ethanol production, which may, subject to regulatory factors and depending on market conditions, mitigate certain significant risks associated with start-up operations for isobutanol production, there can be no assurance that we will be able to revert to ethanol production. Even if we are able to revert to ethanol production, the facility may produce ethanol less efficiently or in lower volumes than it did prior to the retrofit and such ethanol production may not generate positive economic returns. If we are unable to produce isobutanol at the volumes, rates and costs that we expect and are unable to revert back to ethanol production at full capacity, we would be unable to match the facility's historical economic performance and our business, financial condition and results of operations would be materially adversely affected.

**We may not be successful in the development of individual steps in, or an integrated process for, the production of commercial quantities of isobutanol from plant feedstocks in a timely or economic manner, or at all.**

As of the date of this prospectus supplement, we have not produced commercial quantities of isobutanol and we may not be successful in doing so. The production of isobutanol requires multiple integrated steps, including:

- Ø obtaining the plant feedstocks;
- Ø treatment with enzymes to produce fermentable sugars;
- Ø fermentation by organisms to produce isobutanol from the fermentable sugars;
- Ø distillation of the isobutanol to concentrate and separate it from other materials;
- Ø purification of the isobutanol; and
- Ø storage and distribution of the isobutanol.

Our future success depends on our ability to produce commercial quantities of isobutanol in a timely and economic manner. Our biocatalysts have not yet produced commercial volumes of isobutanol. While we have produced isobutanol using our biocatalysts at the demonstration facility and at the Agri-Energy Facility, such production was not at full scale. We have focused the majority of our research and

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development efforts on producing isobutanol from dextrose and challenges remain in achieving substantial production volumes with other sugars, like corn mash. The risk of contamination and other problems rise as we increase the scale of our isobutanol production. If we are unable to successfully manage these risks, we may encounter difficulties in achieving our target isobutanol production yield, rate, concentration or purity at a commercial scale, which could delay or increase the costs involved in commercializing our isobutanol production. In addition, we have limited experience sourcing large quantities of feedstocks and we have no experience storing and/or distributing significant volumes of isobutanol. The technological and logistical challenges associated with each of the processes involved in production, sale and distribution of isobutanol are extraordinary, and we may not be able to resolve any difficulties that arise in a timely or cost effective manner, or at all. Even if we are successful in developing an economical process for converting plant feedstocks into commercial quantities of isobutanol, we may not be able to adapt such process to other biomass raw materials, including cellulosic biomass.

Prior to the Agri-Energy Facility retrofit, which is currently underway, neither we nor ICM had ever built (through retrofit or otherwise) or operated a commercial isobutanol facility. We assume that we understand how the engineering and process characteristics of the one MGPY demonstration facility will scale up to larger facilities, but these assumptions may prove to be incorrect. Accordingly, we cannot be certain that we can manufacture isobutanol in an economical manner in commercial quantities. If our costs to build large-scale commercial isobutanol facilities are significantly higher than we expect or if we fail to manufacture isobutanol economically on a commercial scale or in commercial volumes, our commercialization of isobutanol and our business, financial condition and results of operations will be materially adversely affected.

**We may not be able to successfully identify and acquire access to additional ethanol production facilities suitable for efficient retrofitting, or acquire access to sufficient capacity to be commercially viable or meet customer demand.**

Our strategy currently includes accessing and retrofitting, either independently or with potential development partners, existing ethanol facilities for the production of large quantities of isobutanol for commercial distribution and sale. We have acquired one 22 MGPY ethanol production facility and we have acquired access to one 50 MGPY ethanol production facility pursuant to our joint venture with Redfield. We plan to acquire additional production capacity to enable us to produce and sell approximately 350 MGPY of isobutanol in 2015. We may not find development partners with whom we can implement this growth strategy, and we may not be able to identify facilities suitable for joint venture, acquisition or lease. Even if we successfully identify a facility suitable for efficient retrofitting, we may not be able to acquire access to such facility in a timely manner, if at all. The owners of the ethanol facility may reach an agreement with another party, refuse to consider a joint venture, acquisition or lease, or demand more or different consideration than we are willing to provide. In particular, if the profitability of ethanol production increases, plant owners may be less likely to consider modifying their production, and thus may be less willing to negotiate with us or agree to allow us to retrofit their facilities for isobutanol production. We may also find that it is necessary to offer special terms, incentives and/or rebates to owners of ethanol facilities that allow us to access and retrofit their facilities before our production technology has been proven on a commercial scale. Even if the owners of a facility are interested in reaching an agreement that grants us access to the plant, negotiations may take longer or cost more than we expect, and we may never achieve a final agreement. Further, we may not be able to raise capital on acceptable terms, or at all, to finance our joint venture, acquisition, participation or lease of facilities. Even if we are able to access and retrofit several facilities, we may fail to access enough capacity to be commercially viable or meet the volume demands or minimum requirements of our customers, including pursuant to definitive supply or distribution agreements that we may enter into, which may subject us to monetary damages. For example, under the terms of our international off-take

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and distribution agreement with Sasol, we are required to pay certain shortfall fees if we are not able to supply Sasol with certain minimum quantities of product. Failure to acquire access to sufficient capacity in a timely manner and on favorable terms may slow or stop our commercialization process, which could have a material adverse effect on our business, financial condition and results of operations.

#### **Once we acquire access to ethanol facilities, we may be unable to successfully retrofit them to produce isobutanol, or we may not be able to retrofit them in a timely and cost-effective manner.**

For each ethanol production facility to which we acquire access, we will be required to obtain numerous regulatory approvals and permits to retrofit and operate the facility. These include such items as a modification to the air permit, fuel registration with the U.S. Environmental Protection Agency ( EPA ), ethanol excise tax registration and others. These requirements may not be satisfied in a timely manner, or at all. Later-enacted federal and state governmental requirements may also substantially increase our costs or delay or prevent the completion of a retrofit, which could have a material adverse effect on our business, financial condition and results of operations.

No two ethanol facilities are exactly alike, and each retrofit will require individualized engineering and design work. There is no guarantee that we or any contractor we retain will be able to successfully design a commercially viable retrofit, or properly complete the retrofit once the engineering plans are completed. Prior to the Agri-Energy Facility retrofit, which is currently underway, neither we nor ICM had ever built, via retrofit or otherwise, a full-scale commercial isobutanol facility. Despite our experience with the retrofit of the Agri-Energy Facility, our estimates of the capital costs that we will need to incur to retrofit a commercial-scale ethanol facility may prove to be inaccurate, and each retrofit may cost materially more to engineer and build than we currently anticipate. For example, our estimates assume that each plant we retrofit will be performing at full production capacity, and we may need to expend substantial sums to repair underperforming facilities prior to retrofit.

Our retrofit design was developed in cooperation with ICM and is based on ICM technology. There is no guarantee that our retrofit design will be compatible with existing ethanol facilities that do not utilize ICM technology. Before we can retrofit such facilities, we may need to modify them to be compatible with our retrofit design. This may require significant additional expenditure of time and money, and there is no guarantee such modification will be successful.

Furthermore, the retrofit of acquired facilities will be subject to the risks inherent in the build-out of any manufacturing facility, including risks of delays and cost overruns as a result of factors that may be out of our control, such as delays in the delivery of equipment and subsystems or the failure of such equipment to perform as expected once delivered. In addition, we will depend on third-party relationships in expanding our isobutanol production capacity and such third parties may not fulfill their obligations to us under our arrangements with them. Delays, cost-overruns or failures in the retrofit process will slow our commercial production of isobutanol and harm our performance.

Though our retrofit design for the Agri-Energy Facility includes the capability to switch between isobutanol and ethanol production, we may be unable to successfully revert to ethanol production after we begin retrofit of an ethanol facility, or the facility may produce ethanol less efficiently or in lower volumes than it did before the retrofit. In addition, we may be unable to secure the necessary regulatory approvals and permits to switch between isobutanol and ethanol production in a timely manner, or at all. Thus, if we fail to achieve commercial levels of isobutanol production at a retrofitted facility, we may be unable to rely on ethanol production as an alternative revenue source, which could have a material adverse effect on our prospects.

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#### **Our facilities and process may fail to produce isobutanol at the volumes, rates and costs we expect.**

Some or all of the facilities we choose to retrofit may be in locations distant from corn or other feedstock sources, which could increase our feedstock costs or prevent us from acquiring sufficient feedstock volumes for commercial production. General market conditions might also cause increases in feedstock prices, which could likewise increase our production costs.

Even if we secure access to sufficient volumes of feedstock, the facilities we retrofit for isobutanol production may fail to perform as expected. The equipment and subsystems installed during the retrofit may never operate as planned. Our systems may prove incompatible with the original facility, or require additional modification after installation. Our biocatalyst may perform less efficiently than it did in testing, if at all. Contamination of plant equipment may require us to replace our biocatalyst more often than expected, or cause our fermentation process to yield undesired or harmful by-products. Likewise, our feedstock may contain contaminants like wild yeast, which naturally ferments feedstock into ethanol. The presence of contaminants, such as wild yeast, in our feedstock could reduce the purity of the isobutanol that we produce and require us to invest in more costly isobutanol separation processes or equipment. Unexpected problems may force us to cease or delay production and the time and costs involved with such delays may prove prohibitive. Any or all of these risks could prevent us from achieving the production throughput and yields necessary to achieve our target annualized production run rates and/or to meet the volume demands or minimum requirements of our customers, including pursuant to definitive supply or distribution agreements that we may enter into, which may subject us to monetary damages. For example, under the terms of our international off-take and distribution agreement with Sasol, we are required to pay certain shortfall fees if we are not able to supply Sasol with certain minimum quantities of product. Failure to achieve these rates or meet these minimum requirements, or achieving them only after significant additional expenditures, could substantially harm our commercial performance.

#### **We may be unable to produce isobutanol in accordance with customer specifications.**

Even if we produce isobutanol at our targeted rates, we may be unable to produce isobutanol that meets customer specifications. If we fail to meet specific product or volume specifications contained in a supply agreement, the customer may have the right to seek an alternate supply of isobutanol and/or terminate the agreement completely, and we could be required to pay shortfall fees or otherwise be subject to damages. A failure to successfully meet the specifications of our potential customers could decrease demand, and significantly hinder market adoption of our products.

#### **We lack significant experience operating commercial-scale ethanol and isobutanol facilities, and may encounter substantial difficulties operating commercial plants or expanding our business.**

We have very limited experience operating a commercial ethanol facility and no experience operating a commercial isobutanol facility. Accordingly, we may encounter significant difficulties operating at a commercial scale. We believe that our future facilities will, like the Agri-Energy Facility, be able to continue producing ethanol during much of the retrofit process. We will need to successfully administer and manage this production. Though ICM and the employees of Agri-Energy and Redfield are experienced in the operation of ethanol facilities, and our future development partners or the entities that we acquire may likewise have such experience, we may be unable to manage ethanol-producing operations, especially given the possible complications associated with a simultaneous retrofit. Once we complete a commercial retrofit, operational difficulties may increase, because neither we nor anyone else has experience operating a pure isobutanol fermentation facility at a commercial scale. The skills and

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knowledge gained in operating commercial ethanol facilities or small-scale isobutanol plants may prove insufficient for successful operation of a large-scale isobutanol facility, and we may be required to expend significant time and money to develop our capabilities in isobutanol facility operation. We may also need to hire new employees or contract with third parties to help manage our operations, and our performance will suffer if we are unable to hire qualified parties or if they perform poorly.

We may face additional operational difficulties as we further expand our production capacity. Integrating new facilities with our existing operations may prove difficult. Rapid growth, resulting from our operation of, or other involvement with, isobutanol facilities or otherwise, may impose a significant burden on our administrative and operational resources. To effectively manage our growth and execute our expansion plans, we will need to expand our administrative and operational resources substantially and attract, train, manage and retain qualified management, technicians and other personnel. We may be unable to do so. Failure to meet the operational challenges of developing and managing increased isobutanol production, or failure to otherwise manage our growth, may have a material adverse effect on our business, financial condition and results of operations.

#### **We may have difficulty adapting our technology to commercial-scale fermentation, which could delay or prevent our commercialization of isobutanol.**

While we have succeeded, at the demonstration plant, in reaching our commercial fermentation performance targets for isobutanol concentration, fermentation productivity and isobutanol yield, we have not accomplished this in a commercial plant environment. We are currently optimizing our yeast biocatalyst in anticipation of its integration into commercial facilities, but this process, if it succeeds at all, may take longer or cost more than expected. Our yeast biocatalyst may not be able to meet the commercial performance targets at a commercial-scale retrofitted plant in a timely manner, or ever. In addition, the risk of contamination and other problems may increase at commercial-scale isobutanol production facilities, which could negatively impact our cost of production. If we encounter difficulties in scaling up our production, our commercialization of isobutanol and our business, financial condition and results of operations will be materially adversely affected.

#### **We may have difficulties gaining market acceptance and successfully marketing our isobutanol to customers, including chemical producers and refiners.**

A key component of our business strategy is to market our isobutanol to chemical producers and refiners. We have no experience marketing isobutanol on a commercial scale and we may fail to successfully negotiate marketing agreements in a timely manner or on favorable terms. If we fail to successfully market our isobutanol to refiners and chemical producers, our business, financial condition and results of operations will be materially adversely affected.

We also intend to market our isobutanol to chemical producers for use in making various chemicals such as isobutylene, a type of butene that can be produced through the dehydration of isobutanol. Although a significant market currently exists for isobutylene produced from petroleum, which is widely used in the production of plastics, specialty chemicals, alkylate for gasoline blending and high octane aviation fuel, no one has successfully created isobutylene on a commercial scale from bio-based isobutanol. Therefore, to gain market acceptance and successfully market our isobutanol to chemical producers, we must show that our isobutanol can be converted into isobutylene at a commercial scale. As no company currently dehydrates commercial volumes of isobutanol into isobutylene, we must demonstrate the large-scale feasibility of the process and reach agreements with companies that are willing to invest in the necessary dehydration infrastructure. Failure to reach favorable agreements with these companies, or the inability

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of their plants to convert isobutanol into isobutylene at sufficient scale, will slow our development in the chemicals market and could significantly affect our profitability.

Obtaining market acceptance in the chemicals industry is complicated by the fact that many potential chemicals industry customers have invested substantial amounts of time and money in developing petroleum-based production channels. These potential customers generally have well-developed manufacturing processes and arrangements with suppliers of chemical components, and may display substantial resistance to changing these processes. Pre-existing contractual commitments, unwillingness to invest in new infrastructure, distrust of new production methods and lengthy relationships with current suppliers may all slow market acceptance of isobutanol.

No market currently exists for isobutanol as a fuel or fuel blendstock. Therefore, to gain market acceptance and successfully market our isobutanol to refiners, we must effectively demonstrate the commercial advantages of using isobutanol over other biofuels and blendstocks, as well as our ability to produce isobutanol reliably on a commercial scale at a sufficiently low cost. We must show that isobutanol is compatible with existing infrastructure and does not damage pipes, engines, storage facilities or pumps. We must also overcome marketing and lobbying efforts by producers of other biofuels and blendstocks, including ethanol, many of whom may have greater resources than we do. If the markets for isobutanol as a fuel or fuel blendstock do not develop as we currently anticipate, or if we are unable to penetrate these markets successfully, our revenue and revenue growth rate, if any, could be materially and adversely affected.

We believe that consumer demand for environmentally sensitive products will drive demand among large brand owners for renewable hydrocarbon sources. One of our marketing strategies is to leverage this demand to obtain commitments from large brand owners to purchase products made from our isobutanol by third parties. We believe these commitments will, in turn, promote chemicals industry demand for our isobutanol. If consumer demand for environmentally sensitive products fails to develop at sufficient scale or if such demand fails to drive large brand owners to seek sources of renewable hydrocarbons, our revenue and growth rate could be materially and adversely affected.

### **We may face substantial delay in getting regulatory approvals for use of our isobutanol in the fuels and chemicals markets, which could substantially hinder our ability to commercialize our products.**

Commercialization of our isobutanol will require approvals from state and federal agencies. Before we can sell isobutanol as a fuel or fuel blendstock directly to large petroleum refiners, we must receive EPA fuel certification. We are currently conducting Tier 1 EPA testing, and the approval process may require significant time. Approval can be delayed for years, and there is no guarantee of receiving it. Additionally, California requires that fuels meet both its fuel certification requirements and a separate state low-carbon fuel standard. Any delay in receiving approval will slow or prevent the commercialization of our isobutanol for fuel markets, which could have a material adverse effect on our business, financial condition and results of operations.

Before any biofuel we produce receives a renewable identification number ( RIN ), we must register it with the EPA and receive approval that it meets specified regulatory requirements. Delay or failure in developing a fuel that meets the standards for advanced and cellulosic biofuels, or delays in receiving the desired RIN, will make our fuel less attractive to refiners, blenders, and other purchasers, which could harm our competitiveness.

With respect to the chemicals markets, we plan to focus on isobutanol production and sell to companies that can convert our isobutanol into other chemicals, such as isobutylene. However, should we later

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decide to produce these other chemicals ourselves, we may face similar requirements for EPA and other regulatory approvals. Approval, if ever granted, could be delayed for substantial amounts of time, which could significantly harm the development of our business and prevent the achievement of our goals.

Our isobutanol fermentation process utilizes a genetically modified organism which, when used in an industrial process, is considered a new chemical under the EPA's Toxic Substances Control Act ( TSCA ). The TSCA requires us to comply with the EPA's Microbial Commercial Activity Notice process to operate plants producing isobutanol using our biocatalysts. The TSCA's new chemicals submission policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our isobutanol production.

There are various third-party certification organizations, such as ASTM and Underwriters Laboratories, Inc., involved in standard-setting regarding the transportation, dispensing and use of liquid fuel in the U.S. and abroad. These organizations may change the current standards and additional requirements may be enacted that could prevent or delay approval of our products. The process of seeking required approvals and the continuing need for compliance with applicable standards may require the expenditure of substantial resources, and there is no guarantee that we will satisfy these standards in a timely manner, if ever.

In addition, to retrofit ethanol facilities and operate the retrofitted plants to produce isobutanol, we will need to obtain and comply with a number of permit requirements. As a condition to granting necessary permits, regulators may make demands that could increase our retrofit or operations costs, and permit conditions could also restrict or limit the extent of our operations, which could delay or prevent our commercial production of isobutanol. We cannot guarantee that we will be able to meet all regulatory requirements or obtain and comply with all necessary permits to complete our planned ethanol plant retrofits, and failure to satisfy these requirements in a timely manner, or at all, could have a substantial negative effect on our performance.

We are in negotiations, facilitated by the Air Transport Association of America ( ATA ) with several major passenger and cargo airlines for potential commitments by several ATA member airlines to purchase jet fuel manufactured by third parties from our isobutanol. Jet fuels must meet various statutory and regulatory requirements before they may be used in commercial aviation. In the U.S., the use of specific jet fuels is regulated by the Federal Aviation Administration ( FAA ). Rather than directly approving specific fuels, the FAA certifies individual aircraft for flight. This certification includes authorization for an aircraft to use the types of fuels specified in its flight manual. To be included in an aircraft's flight manual, the fuel must meet standards set by ASTM. The current ASTM requirements do not permit the use of jet fuel derived from isobutanol, and we will need to give ASTM sufficient data to justify creating a new standard applicable to ATJ. Though our work testing isobutanol-based ATJ with the U.S. Air Force Research Laboratory has provided us with data we believe ASTM will take into consideration, the process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations will require the expenditure of substantial resources. Failure to obtain regulatory approval in a timely manner, or at all, could have a significant negative effect on our operations.

### **We may be unable to successfully negotiate final, binding terms related to our current non-binding isobutanol supply and distribution agreements, which could harm our commercial prospects.**

We have engaged in negotiations with a number of companies, and have agreed to preliminary terms regarding supplying isobutanol or the products derived from it to various companies for their use or

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further distribution, including LANXESS, Toray Industries, United Airlines and TOTAL PETROCHEMICALS. However, as of June 15, 2012, we are not party to any final, definitive supply or distribution agreements for our isobutanol, other than our exclusive supply agreement with LANXESS, our international off-take and distribution agreement with Sasol, our commercial off-take agreement with Mansfield, our joint development agreement with Toray Industries and our contract from the DLA. We may be unable to negotiate final terms with other companies in a timely manner, or at all, and there is no guarantee that the terms of any final agreement will be the same or similar to those currently contemplated in our preliminary agreements. Final terms may include less favorable pricing structures or volume commitments, more expensive delivery or purity requirements, reduced contract durations and other adverse changes. Delays in negotiating final contracts could slow our initial isobutanol commercialization, and failure to agree to definitive terms for sales of sufficient volumes of isobutanol could prevent us from growing our business. To the extent that terms in our initial supply and distribution contracts may influence negotiations regarding future contracts, the failure to negotiate favorable final terms related to our current preliminary agreements could have an especially negative impact on our growth and profitability. Additionally, as we have yet to produce or supply commercial volumes of isobutanol to any customer, we have not demonstrated that we can meet the production levels contemplated in our current non-binding supply agreements. If our production scale-up proceeds more slowly than we expect, or if we encounter difficulties in successfully completing plant retrofits, potential customers, including those with whom we have current letters of intent, may be less willing to negotiate definitive supply agreements, or demand terms less favorable to us, and our performance may suffer.

#### **Even if we are successful in producing isobutanol on a commercial scale, we may not be successful in negotiating sufficient supply agreements for our production.**

We expect that many of our customers will be large companies with extensive experience operating in the fuels or chemicals markets. As a development stage company, we lack commercial operating experience, and may face difficulties in developing marketing expertise in these fields. Our business model relies upon our ability to successfully negotiate and structure long-term supply agreements for the isobutanol we produce. Many of our potential customers may be more experienced in these matters than we are, and we may fail to successfully negotiate these agreements in a timely manner or on favorable terms which, in turn, may force us to slow our production, delay our acquiring and retrofitting of additional plants, dedicate additional resources to increasing our storage capacity and/or dedicate resources to sales in spot markets. Furthermore, should we become more dependent on spot market sales, our profitability will become increasingly vulnerable to short-term fluctuations in the price and demand for petroleum-based fuels and competing substitutes.

#### **Our isobutanol may encounter physical or regulatory issues, which could limit its usefulness as a fuel blendstock.**

In the fuel blendstock market, isobutanol can be used in conjunction with, or as a substitute for, ethanol and other widely-used fuel oxygenates, and we believe our isobutanol will be physically compatible with typical gasoline engines. However, there is a risk that under actual engine conditions, isobutanol will face significant limitations, making it unsuitable for use in high percentage gasoline blends. Additionally, current regulations limit fuel blends to low percentages of isobutanol, and also limit combination isobutanol-ethanol blends. Government agencies may maintain or even increase the restrictions on isobutanol fuel blends. As we believe that the potential to use isobutanol in higher percentage blends than is feasible for ethanol will be an important factor in successfully marketing isobutanol to refiners, a low blend wall could significantly limit commercialization of isobutanol as a fuel blendstock.

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#### **Our isobutanol may be less compatible with existing refining and transportation infrastructure than we believe, which may hinder our ability to market our product on a large scale.**

We developed our business model based on our belief that our isobutanol is fully compatible with existing refinery infrastructure. For example, when making isobutanol blends, we believe that gasoline refineries will be able to pump our isobutanol through their pipes and blend it in their existing facilities without damaging their equipment. If our isobutanol proves unsuitable for such handling, it will be more expensive for refiners to use our isobutanol than we anticipate, and they may be less willing to adopt it as a fuel blendstock, forcing us to seek alternative purchasers.

Likewise, our plans for marketing our isobutanol are based upon our belief that it will be compatible with the pipes, tanks and other infrastructure currently used for transporting, storing and distributing gasoline. If our isobutanol or products incorporating our isobutanol cannot be transported with this equipment, we will be forced to seek alternative transportation arrangements, which will make our isobutanol and products produced from our isobutanol more expensive to transport and less appealing to potential customers. Reduced compatibility with either refinery or transportation infrastructure may slow or prevent market adoption of our isobutanol, which could substantially harm our performance.

Most of the ethanol plants we initially plan to retrofit use dry-milled corn as a feedstock. We plan to sell, as animal feed, the iDGs left as a co-product of fermenting isobutanol from dry-milled corn. We believe that this will enable us to offset a significant portion of the expense of purchasing corn for fermentation. We are currently approved to sell iDGs into animal feed through a self-assessed GRAS process via third party scientific review. In order to improve the value of our iDGs, we are also in the process of obtaining FDA approval for the marketing of our iDGs. We believe obtaining FDA approval will increase the value of our iDGs by offering customers of our iDGs further assurance of the safety of our iDGs. FDA testing and approval can take a significant amount of time, and there is no guarantee that we will ever receive such approval. If FDA approval is delayed or never obtained, or if we are unable to secure market acceptance for our iDGs, our net cost of production will increase, which may hurt our operating results.

#### **Our development strategy relies heavily on our relationship with ICM.**

We rely heavily upon our relationship with ICM. In October 2008, we entered into a development agreement and a commercialization agreement with ICM, each of which has since been amended. Pursuant to the terms of the development agreement, ICM engineers helped us install the equipment necessary to test and develop our isobutanol fermentation process at ICM's one MGPY ethanol demonstration facility, and ICM agreed to assist us in running and maintaining the converted plant. We have been using the demonstration plant to improve our biocatalysts and to develop processes for commercial-scale production of isobutanol. Under the commercialization agreement, as amended, ICM serves as our exclusive engineering, procurement and construction (EPC) contractor for the retrofit of ethanol plants, and we serve as ICM's exclusive technology partner for the production of butanols, pentanols and propanols from the fermentation of sugars. In August 2011, we entered into a work agreement with ICM. Pursuant to the terms of the work agreement, ICM provides EPC services for the retrofit of ethanol plants.

Because ICM has designed over 50% of the current operating ethanol production capacity in the U.S., we believe that our exclusive alliance with ICM will provide us with a competitive advantage and allow us to more quickly achieve commercial-scale production of isobutanol. However, ICM may fail to fulfill its obligations to us under our agreements and under certain circumstances, such as a breach of

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confidentiality by us, can terminate the agreements. In addition, ICM may assign the agreements without our consent in connection with a change of control. Since adapting our technology to commercial-scale production of isobutanol and then retrofitting ethanol plants to use our technology is a major part of our commercialization strategy, losing our exclusive alliance with ICM would slow our technological and commercial development. It could also force us to find a new contractor with less experience than ICM in designing and building ethanol plants, or to invest the time and resources necessary to retrofit plants on our own. Such retrofits may be less successful than if performed by ICM engineers, and retrofitted plants might operate less efficiently than expected. This could substantially hinder our ability to expand our production capacity, and could severely impact our performance. If ICM fails to fulfill its obligations to us under our agreements and our competitors obtain access to ICM's expertise, our ability to realize continued development and commercial benefits from our alliance could be affected. Accordingly, if we lose our exclusive alliance with ICM, if ICM terminates or breaches its agreements with us, or if ICM assigns its agreements with us to a competitor of ours or to a third party that is not willing to work with us on the same terms or commit the same resources, our business and prospects could be harmed.

**We may require substantial additional financing to achieve our goals, and a failure to obtain this capital when needed or on acceptable terms could force us to delay, limit, reduce or terminate our development and commercialization efforts.**

Since our inception, most of our resources have been dedicated to research and development, as well as demonstrating the effectiveness of our technology. We believe that we will continue to expend substantial resources for the foreseeable future on further developing our technologies, developing future markets for our isobutanol and accessing facilities necessary for the production of isobutanol on a commercial scale. These expenditures will include costs associated with research and development, accessing existing ethanol plants, retrofitting the plants to produce isobutanol, obtaining government and regulatory approvals, acquiring or constructing storage facilities and negotiating supply agreements for the isobutanol we produce. In addition, other unanticipated costs may arise. Because the costs of developing our technology at a commercial scale are highly uncertain, we cannot reasonably estimate the amounts necessary to successfully commercialize our production.

To date, we have funded our operations primarily through equity offerings, including our initial public offering in February 2011, and borrowings under our secured debt financing arrangements. Based on our current plans and expectations, we will require additional funding to achieve our goal of producing and selling approximately 350 million gallons of isobutanol in 2015. In addition, the cost of preparing, filing, prosecuting, maintaining and enforcing patent, trademark and other intellectual property rights and defending against claims by others that we may be violating their intellectual property rights, including the current litigation with Butamax, may be significant. Moreover, our plans and expectations may change as a result of factors currently unknown to us, and we may need additional funds sooner than planned. We may also choose to seek additional capital sooner than required due to favorable market conditions or strategic considerations.

Our future capital requirements will depend on many factors, including:

- ∅ the timing of, and costs involved in developing our technologies for commercial-scale production of isobutanol;
- ∅ the timing of, and costs involved in accessing existing ethanol plants;
- ∅ the timing of, and costs involved in retrofitting the plants we access with our technologies;
- ∅ the costs involved in establishing an enhanced yeast seed train;



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- Ø the cost of operating, maintaining and increasing production capacity of the retrofitted plants;
- Ø our ability to negotiate agreements supplying suitable biomass to our plants, and the timing and terms of those agreements;
- Ø the timing of, and the costs involved in developing adequate storage facilities for the isobutanol we produce;
- Ø our ability to gain market acceptance for isobutanol as a specialty chemical, gasoline blendstock and as a raw material for the production of hydrocarbons;
- Ø our ability to negotiate supply agreements for the isobutanol we produce, and the timing and terms of those agreements;
- Ø our ability to negotiate sales of our isobutanol for commercial-scale production of butenes and other industrially useful chemicals and fuels, and the timing and terms of those sales;
- Ø our ability to sell the iDGs left as a co-product of fermenting isobutanol from corn as animal feedstock;
- Ø our ability to establish and maintain strategic partnerships, licensing or other arrangements and the timing and terms of those arrangements; and
- Ø the cost of preparing, filing, prosecuting, maintaining, defending and enforcing patent, trademark and other intellectual property claims, including litigation costs and the outcome of such litigation.  
Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If needed funds are not available to us on a timely basis, we may be required to delay, limit, reduce or terminate:
- Ø our research and development activities;
- Ø our plans to access and/or retrofit existing ethanol facilities;
- Ø our production of isobutanol at retrofitted plants; and/or
- Ø our activities in developing storage capacity and negotiating supply agreements that may be necessary for the commercialization of our isobutanol production.

**Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies.**

We are seeking to raise additional equity capital through the offering contemplated by this prospectus and through the concurrent common stock offering and we may seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and licensing arrangements. To the extent that we raise additional capital through the sale or issuance of equity, warrants or convertible debt securities, your ownership interest will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect your rights as a stockholder. If we raise capital through debt financing, it may involve agreements that include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through strategic partnerships or licensing agreements with third parties, we may have to relinquish valuable rights to our technologies, or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds when needed, we may be required to delay, limit, reduce or terminate our development and commercialization efforts.

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#### **Our quarterly operating results may fluctuate in the future. As a result, we may fail to meet or exceed the expectations of research analysts or investors, which could cause our stock price to decline.**

Our financial condition and operating results have varied significantly in the past and may continue to fluctuate from quarter to quarter and year to year in the future due to a variety of factors, many of which are beyond our control. Factors relating to our business that may contribute to these fluctuations are described in our Annual Report on Form 10-K, as amended, and other reports that we have filed with the SEC. Accordingly, the results of any prior quarterly or annual periods should not be relied upon as indications of our future operating performance.

#### **Fluctuations in the price of corn and other feedstocks may affect our cost structure.**

Our approach to the biofuels and chemicals markets will be dependent on the price of corn and other feedstocks that will be used to produce isobutanol. A decrease in the availability of plant feedstocks or an increase in the price may have a material adverse effect on our financial condition and operating results. At certain levels, prices may make these products uneconomical to use and produce, as we may be unable to pass the full amount of feedstock cost increases on to our customers.

The price and availability of corn and other plant feedstocks may be influenced by general economic, market and regulatory factors. These factors include weather conditions, farming decisions, government policies and subsidies with respect to agriculture and international trade, and global demand and supply. The significance and relative impact of these factors on the price of plant feedstocks is difficult to predict, especially without knowing what types of plant feedstock materials we may need to use.

#### **Fluctuations in the price and availability of natural gas may harm our performance.**

The ethanol facilities we are retrofitting or plan to retrofit to produce isobutanol, including the Agri-Energy Facility in Luverne, Minnesota, and the Redfield Facility in Redfield, South Dakota, use significant amounts of natural gas to produce ethanol. After retrofit with our GIFT<sup>®</sup> technology, these facilities will continue to require natural gas to produce isobutanol. Accordingly, our business is dependent upon natural gas supplied by third parties. Should the price of natural gas increase, our performance could suffer. Likewise, disruptions in the supply of natural gas could have a material impact on our business and results of operations.

#### **Fluctuations in petroleum prices and customer demand patterns may reduce demand for biofuels and bio-based chemicals.**

We anticipate marketing our biofuel as an alternative to petroleum-based fuels. Therefore, if the price of oil falls, any revenues that we generate from biofuel products could decline, and we may be unable to produce products that are a commercially viable alternative to petroleum-based fuels. Additionally, demand for liquid transportation fuels, including biofuels, may decrease due to economic conditions or otherwise. We will encounter similar risks in the chemicals industry, where declines in the price of oil may make petroleum-based hydrocarbons less expensive, which could reduce the competitiveness of our bio-based alternatives.

#### **Changes in the prices of distiller's grains and iDGs could have a material adverse effect on our financial condition.**

From September 2010 through May 2012, we sold distiller's grains as a co-product from the production of ethanol at the Agri-Energy Facility in Luverne, Minnesota and we may sell distiller's grains produced by other ethanol facilities that we acquire in the future. We also plan to sell the iDGs that will be

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produced as a co-product of our commercial isobutanol production. Distiller's grains and iDGs compete with other animal feed products, and decreases in the prices of these other products could decrease the demand for and price of distiller's grains and iDGs. Additionally, we have not yet produced commercial iDGs and, as such, there is a risk that our iDGs may not meet market requirements. If the price of distiller's grains and iDGs decreases or our iDGs do not meet market requirements, our revenue from the sale of distiller's grains and iDGs could suffer, which could have a material adverse effect on our financial condition.

**To the extent that we produce ethanol at accessed plants before commencing isobutanol production, we will be vulnerable to fluctuations in the price of and cost to produce ethanol.**

We believe that, like the Agri-Energy Facility, the other ethanol production facilities we access will continue to produce ethanol during most of the retrofit process. In most cases, we expect to obtain income from this ethanol production. Our earnings from ethanol revenue will be dependent on the price of, demand for and cost to produce ethanol. Decreases in the price of ethanol, whether caused by decreases in gasoline prices, changes in regulations, seasonal fluctuations or otherwise, will reduce our revenues, while increases in the cost of production will reduce our margins. Many of these risks, including fluctuations in feedstock costs and natural gas costs, are identical to risks we will face in the production of isobutanol. To the extent that ethanol production costs increase or price decreases, earnings from ethanol production could suffer, which could have a material adverse effect on our business.

**Reductions or changes to existing regulations and policies may present technical, regulatory and economic barriers, all of which may significantly reduce demand for biofuels or our ability to supply isobutanol.**

The market for biofuels is heavily influenced by foreign, federal, state and local government regulations and policies concerning the petroleum industry. For example, in 2007, the U.S. Congress passed an alternative fuels mandate that required nearly 14 billion gallons of liquid transportation fuels sold in 2011 to come from alternative sources, including biofuels, a mandate that grows to 36 billion gallons by 2022. Of this amount, a minimum of 21 billion gallons must be advanced biofuels. In the U.S. and in a number of other countries, these regulations and policies have been modified in the past and may be modified again in the future. Any reduction in mandated requirements for fuel alternatives and additives to gasoline may cause demand for biofuels to decline and deter investment in the research and development of biofuels. Market uncertainty regarding future policies may also affect our ability to develop new biofuels products or to license our technologies to third parties. Any inability to address these requirements and any regulatory or policy changes could have a material adverse effect on our biofuels business, financial condition and results of operations. Our other potential bioindustrial products may be subject to additional regulations.

Additionally, like the ethanol facilities that we retrofit, our isobutanol plants will emit greenhouse gases. Any changes in state or federal emissions regulations, including the passage of cap-and-trade legislation or a carbon tax, could limit our production of isobutanol and iDGs and increase our operating costs, which could have a material adverse effect on our business, financial condition and results of operations.

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#### **If we engage in additional acquisitions, we will incur a variety of costs and may potentially face numerous risks that could adversely affect our business and operations.**

If appropriate opportunities become available, we expect to acquire businesses, assets, technologies or products to enhance our business in the future. In connection with any future acquisitions, we could:

Ø issue additional equity securities which would dilute our current stockholders;

Ø incur substantial debt to fund the acquisitions; or

Ø assume significant liabilities.

Acquisitions involve numerous risks, including problems integrating the purchased operations, technologies or products, unanticipated costs and other liabilities, diversion of management's attention from our core business, adverse effects on existing business relationships with current and/or prospective partners, customers and/or suppliers, risks associated with entering markets in which we have no or limited prior experience and potential loss of key employees. Other than our acquisition of Agri-Energy, we have not engaged in acquisitions in the past, and do not have experience in managing the integration process. Therefore, we may not be able to successfully integrate any businesses, assets, products, technologies or personnel that we might acquire in the future without a significant expenditure of operating, financial and management resources, if at all. The integration process could divert management time from focusing on operating our business, result in a decline in employee morale and cause retention issues to arise from changes in compensation, reporting relationships, future prospects or the direction of the business. Acquisitions may also require us to record goodwill, non-amortizable intangible assets that will be subject to impairment testing on a regular basis and potential periodic impairment charges, incur amortization expenses related to certain intangible assets and incur large and immediate write-offs and restructuring and other related expenses, all of which could harm our operating results and financial condition. In addition, we may acquire companies that have insufficient internal financial controls, which could impair our ability to integrate the acquired company and adversely impact our financial reporting. If we fail in our integration efforts with respect to any of our acquisitions and are unable to efficiently operate as a combined organization, our business, financial condition and results of operations may be materially adversely affected.

#### **If we engage in additional joint ventures, we will incur a variety of costs and may potentially face numerous risks that could adversely affect our business and operations.**

If appropriate opportunities become available, we expect to enter into joint ventures with the owners of existing ethanol production facilities in order to acquire access to additional isobutanol production capacity. We currently anticipate that in each such joint venture, the ethanol producer would contribute access to its existing ethanol production facility and we would be responsible for retrofitting such facility to produce isobutanol. Upon completion of the retrofit, and in some cases the attainment of certain performance targets, both parties to the joint venture would receive a portion of the profits from the sale of isobutanol, consistent with our business model. In connection with these joint ventures, we could incur substantial debt to fund the retrofit of the accessed facilities and we could assume significant liabilities.

Realizing the anticipated benefits of joint ventures, including projected increases to production capacity and additional revenue opportunities, involves a number of potential challenges. The failure to meet these challenges could seriously harm our financial condition and results of operations. Joint ventures are



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complex and time-consuming and we may encounter unexpected difficulties or incur unexpected costs related to such arrangements, including:

- ∅ difficulties negotiating joint venture agreements with favorable terms and establishing relevant performance metrics;
- ∅ difficulties completing the retrofits of the accessed facilities using our integrated fermentation technology;
- ∅ the inability to meet applicable performance targets related to the production of isobutanol;
- ∅ difficulties obtaining the permits and approvals required to produce and sell our products in different geographic areas;
- ∅ complexities associated with managing the geographic separation of accessed facilities;
- ∅ diversion of management attention from ongoing business concerns to matters related to the joint ventures;
- ∅ difficulties maintaining effective relationships with personnel from different corporate cultures; and
- ∅ the inability to generate sufficient revenue to offset retrofit costs.

Additionally, our joint venture partners may have liabilities or adverse operating issues that we fail to discover through due diligence prior to entering into the joint ventures. In particular, to the extent that our joint venture partners failed to comply with or otherwise violated applicable laws or regulations, or failed to fulfill their contractual obligations, we may suffer financial harm and/or reputational harm for these violations or otherwise be adversely affected.

Our joint venture partners may have significant amounts of existing debt and may not be able to service their existing debt obligations, which could cause the failure of a specific project and the loss by us of any investment we have made to retrofit the facilities owned by the joint venture partner. In addition, if we are unable to meet specified performance targets related to the production of isobutanol at a facility owned by one of our joint venture partners, we may never become eligible to receive a portion of the profits of the joint venture and may be unable to recover the costs of retrofitting the facility.

Additionally, we plan to be the sole marketer for all isobutanol and co-products produced using our proprietary technology including, without limitation, all isobutanol that is produced by any facilities that we access via joint venture. Marketing agreements can be very complex and the obligations that we assume as the sole marketer of isobutanol may be time consuming. We have no experience marketing isobutanol on a commercial scale and we may fail to successfully negotiate marketing agreements in a timely manner or on favorable terms. If we fail to successfully market the isobutanol produced using our proprietary technology to refiners and chemical producers, our business, financial condition and results of operations will be materially adversely affected.

**If we lose key personnel, including key management personnel, or are unable to attract and retain additional personnel, it could delay our product development programs and harm our research and development efforts, we may be unable to pursue partnerships or develop our own products and it may trigger an event of default under our loan agreements with TriplePoint.**

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Our business is complex and we intend to target a variety of markets. Therefore, it is critical that our management team and employee workforce are knowledgeable in the areas in which we operate. The loss of any key members of our management, including our named executive officers, or the failure to attract

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or retain other key employees who possess the requisite expertise for the conduct of our business, could prevent us from developing and commercializing our products for our target markets and entering into partnerships or licensing arrangements to execute our business strategy. In addition, the loss of any key scientific staff, or the failure to attract or retain other key scientific employees, could prevent us from developing and commercializing our products for our target markets and entering into partnerships or licensing arrangements to execute our business strategy. We may not be able to attract or retain qualified employees in the future due to the intense competition for qualified personnel among biotechnology and other technology-based businesses, particularly in the advanced biofuels area, or due to the limited availability of personnel with the qualifications or experience necessary for our renewable chemicals and advanced biofuels business. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience staffing constraints that will adversely affect our ability to meet the demands of our partners and customers in a timely fashion or to support our internal research and development programs. In particular, our product and process development programs are dependent on our ability to attract and retain highly skilled scientists. Competition for experienced scientists and other technical personnel from numerous companies and academic and other research institutions may limit our ability to do so on acceptable terms. Additionally, certain changes in our management could trigger an event of default under our loan and security agreements with TriplePoint, and we could be forced to pay the outstanding balance of the loan(s) in full. All of our employees are at-will employees, which means that either the employee or we may terminate their employment at any time.

Our planned activities will require additional expertise in specific industries and areas applicable to the products and processes developed through our technology platform or acquired through strategic or other transactions, especially in the end markets that we seek to penetrate. These activities will require the addition of new personnel, and the development of additional expertise by existing personnel. The inability to attract personnel with appropriate skills or to develop the necessary expertise could impair our ability to grow our business.

**Our ability to compete may be adversely affected if we do not adequately protect our proprietary technologies or if we lose some of our intellectual property rights through costly litigation or administrative proceedings.**

Our success will depend in part on our ability to obtain patents and maintain adequate protection of our intellectual property covering our technologies and products and potential products in the U.S. and other countries. We have adopted a strategy of seeking patent protection in the U.S. and in certain foreign countries with respect to certain of the technologies used in or relating to our products and processes. As such, as of June 22, 2012, we exclusively licensed rights to 101 issued patents and filed patent applications in the U.S. and in various foreign jurisdictions, and we owned rights to approximately 325 issued patents and filed patent applications in the U.S. and in various foreign jurisdictions. When and if issued, patents would expire at the end of their term and any patent would only provide us commercial advantage for a limited period of time, if at all. Our patent applications are directed to our enabling technologies and to our methods and products which support our business in the advanced biofuels and renewable chemicals markets. We intend to continue to apply for patents relating to our technologies, methods and products as we deem appropriate.

Only nine of the patent applications that we have filed in the U.S. or in any foreign jurisdictions, and only certain of the patent applications filed by third parties in which we own rights, have been issued. A filed patent application does not guarantee a patent will issue and a patent issuing does not guarantee its validity, nor does it give us the right to practice the patented technology or commercialize the patented product. Third parties may have or obtain rights to blocking patents that could be used to prevent us from commercializing our products or practicing our technology. The scope and validity of patents and

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success in prosecuting patent applications involve complex legal and factual questions and, therefore, issuance, coverage and validity cannot be predicted with any certainty. Patents issuing from our filed applications may be challenged, invalidated or circumvented. Moreover, third parties could practice our inventions in secret and in territories where we do not have patent protection. Such third parties may then try to sell or import products made using our inventions in and into the U.S. or other territories and we may be unable to prove that such products were made using our inventions. Additional uncertainty may result from implementation of the Leahy-Smith America Invents Act, enacted in September 2011, as well as other potential patent reform legislation passed by the U.S. Congress and from legal precedent as handed down by the U.S. Court of Appeals for the Federal Circuit and the U.S. Supreme Court, as they determine legal issues concerning the scope, validity and construction of patent claims. Because patent applications in the U.S. and many foreign jurisdictions are typically not published until 18 months after filing, or in some cases not at all, and because publication of discoveries in the scientific literature often lags behind the actual discoveries, there is additional uncertainty as to the validity of any patents that may issue and the potential for blocking patents coming into force at some future date. Accordingly, we cannot ensure that any of our currently filed or future patent applications will result in issued patents, or even if issued, predict the scope of the claims that may issue in our and other companies' patents. Given that the degree of future protection for our proprietary rights is uncertain, we cannot ensure that (i) we were the first to make the inventions covered by each of our filed applications, (ii) we were the first to file patent applications for these inventions, (iii) the proprietary technologies we develop will be patentable, (iv) any patents issued will be broad enough in scope to provide commercial advantage and prevent circumvention, and (v) competitors and other parties do not have or will not obtain patent protection that will block our development and commercialization activities.

These concerns apply equally to patents we have licensed, which may likewise be challenged, invalidated or circumvented, and the licensed technologies may be obstructed from commercialization by competitors' blocking patents. In addition, we generally do not control the patent prosecution and maintenance of subject matter that we license from others. Generally, the licensors are primarily or wholly responsible for the patent prosecution and maintenance activities pertaining to the patent applications and patents we license, while we may only be afforded opportunities to comment on such activities. Accordingly, we are unable to exercise the same degree of control over licensed intellectual property as we exercise over our own intellectual property and we face the risk that our licensors will not prosecute or maintain it as effectively as we would like.

In addition, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our intellectual property is difficult, particularly where, as here, the end products reaching the market generally do not reveal the processes used in their manufacture, and particularly in certain foreign countries where the local laws may not protect our proprietary rights as fully as in the U.S., so we cannot be certain that the steps we have taken in obtaining intellectual property and other proprietary rights will prevent unauthorized use of our technology. If competitors are able to use our technology without our authorization, our ability to compete effectively could be adversely affected. Moreover, competitors and other parties such as universities may independently develop and obtain patents for technologies that are similar to or superior to our technologies. If that happens, the potential competitive advantages provided by our intellectual property may be adversely affected. We may then need to license these competing technologies, and we may not be able to obtain licenses on reasonable terms, if at all, which could cause material harm to our business. Accordingly, litigation may be necessary for us to assert claims of infringement, enforce patents we own or license, protect trade secrets or determine the enforceability, scope and validity of the intellectual property rights of others.

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Our commercial success also depends in part on not infringing patents and proprietary rights of third parties, and not breaching any licenses or other agreements that we have entered into with regard to our technologies, products and business. We cannot be certain that patents have not or will not issue to third parties that could block our ability to obtain patents or to operate our business as we would like, or at all. There may be patents in some countries that, if valid, may block our ability to commercialize products in those countries if we are unsuccessful in circumventing or acquiring rights to these patents. There may also be claims in patent applications filed in some countries that, if granted and valid, may also block our ability to commercialize products or processes in these countries if we are unable to circumvent or license them.

As is commonplace in the biotechnology industries, some of our directors, employees and consultants are or have been employed at, or associated with, companies and universities that compete with us or have or will develop similar technologies and related intellectual property. While employed at these companies, these employees, directors and consultants may have been exposed to or involved in research and technology similar to the areas of research and technology in which we are engaged. Though we have not received such a complaint, we may be subject to allegations that we, our directors, employees or consultants have inadvertently or otherwise used, misappropriated or disclosed alleged trade secrets or confidential or proprietary information of those companies. Litigation may be necessary to defend against such allegations and the outcome of any such litigation would be uncertain.

Under some of our research agreements, our partners share joint rights in certain intellectual property we develop. For example, under our development agreement with ICM, we have exclusive rights to all intellectual property developed within the defined scope of the project, but all other intellectual property developed pursuant to the agreement is to be jointly owned. Such provisions may limit our ability to gain commercial benefit from some of the intellectual property we develop, and may lead to costly or time-consuming disputes with parties with whom we have commercial relationships over rights to certain innovations.

If any other party has filed patent applications or obtained patents that claim inventions also claimed by us, we may have to participate in interference, derivation or other proceedings declared by the United States Patent and Trademark Office to determine priority of invention and, thus, the right to the patents for these inventions in the U.S. These proceedings could result in substantial cost to us even if the outcome is favorable. Even if successful, such a proceeding may result in the loss of certain claims. Even successful outcomes of such proceedings could result in significant legal fees and other expenses, diversion of management time and efforts and disruption in our business. Uncertainties resulting from initiation and continuation of any patent or related litigation could harm our ability to compete.

### **Our government grants are subject to uncertainty, which could harm our business and results of operations.**

We have received various government grants, including a cooperative agreement, to complement and enhance our own resources. We may seek to obtain government grants and subsidies in the future to offset all or a portion of the costs of retrofitting existing ethanol manufacturing facilities and the costs of our research and development activities. We cannot be certain that we will be able to secure any such government grants or subsidies. Any of our existing grants or new grants that we may obtain may be terminated, modified or recovered by the granting governmental body under certain conditions.

We may also be subject to audits by government agencies as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. Funds available under grants

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### **Risk factors**

must be applied by us toward the research and development programs specified by the granting agencies, rather than for all of our programs generally. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed may have to be refunded. Accordingly, an audit could result in an adjustment to our revenues and results of operations.

#### **We have received funding from U.S. government agencies, which could negatively affect our intellectual property rights.**

Some of our research has been funded by grants from U.S. government agencies. When new technologies are developed with U.S. government funding, the government obtains certain rights in any resulting patents and technical data, generally including, at a minimum, a nonexclusive license authorizing the government to use the invention or technical data for noncommercial purposes. U.S. government funding must be disclosed in any resulting patent applications, and our rights in such inventions will normally be subject to government license rights, periodic progress reporting, foreign manufacturing restrictions and march-in rights. March-in rights refer to the right of the U.S. government, under certain limited circumstances, to require us to grant a license to technology developed under a government grant to a responsible applicant or, if we refuse, to grant such a license itself. March-in rights can be triggered if the government determines that we have failed to work sufficiently towards achieving practical application of a technology or if action is necessary to alleviate health or safety needs, to meet requirements of federal regulations or to give preference to U.S. industry. If we breach the terms of our grants, the government may gain rights to the intellectual property developed in our related research. The government's rights in our intellectual property may lessen its commercial value, which could adversely affect our performance.

#### **We may not be able to enforce our intellectual property rights throughout the world.**

The laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the U.S. Many companies have encountered significant problems in protecting and enforcing intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to bioindustrial technologies. This could make it difficult for us to stop the infringement of our patents or misappropriation of our other intellectual property rights. Proceedings to enforce our patents and other proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business. Accordingly, our efforts to enforce our intellectual property rights in such countries may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop.

#### **If our biocatalysts, or the genes that code for our biocatalysts, are stolen, misappropriated or reverse engineered, others could use these biocatalysts or genes to produce competing products.**

Third parties, including our contract manufacturers, customers and those involved in shipping our biocatalysts, may have custody or control of our biocatalysts. If our biocatalysts, or the genes that code for our biocatalysts, were stolen, misappropriated or reverse engineered, they could be used by other parties who may be able to reproduce these biocatalysts for their own commercial gain. If this were to occur, it would be difficult for us to discover or challenge this type of use, especially in countries with limited intellectual property protection.

#### **Confidentiality agreements with employees and others may not adequately prevent disclosures of trade secrets and other proprietary information.**

We rely in part on trade secret protection to protect our confidential and proprietary information and processes. However, trade secrets are difficult to protect. We have taken measures to protect our trade



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secrets and proprietary information, but these measures may not be effective. We require new employees and consultants to execute confidentiality agreements upon the commencement of an employment or consulting arrangement with us. These agreements generally require that all confidential information developed by the individual or made known to the individual by us during the course of the individual's relationship with us be kept confidential and not disclosed to third parties. These agreements also generally provide that know-how and inventions conceived by the individual in the course of rendering services to us shall be our exclusive property. Nevertheless, these agreements may not be enforceable, our proprietary information may be disclosed, third parties could reverse engineer our biocatalysts and others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection could adversely affect our competitive business position. In addition, an unauthorized breach in our information technology systems may expose our trade secrets and other proprietary information to unauthorized parties.

### **We may face substantial competition, which could adversely affect our performance and growth.**

We may face substantial competition in the markets for isobutanol, plastics, fibers, rubber, other polymers and hydrocarbon fuels. Our competitors include companies in the incumbent petroleum-based industry as well as those in the nascent biorenewable industry. The incumbent petroleum-based industry benefits from a large established infrastructure, production capability and business relationships. The incumbents' greater resources and financial strength provide significant competitive advantages that we may not be able to overcome in a timely manner. Academic and government institutions may also develop technologies, which will compete with us in the chemicals, solvents and blendstock markets.

The biorenewable industry is characterized by rapid technological change. Our future success will depend on our ability to maintain a competitive position with respect to technological advances. Technological development by others may impact the competitiveness of our products in the marketplace. Competitors and potential competitors who have greater resources and experience than we do may develop products and technologies that make ours obsolete or may use their greater resources to gain market share at our expense.

In the production of isobutanol, we face competition from DuPont, which has announced plans to develop and market isobutanol through Butamax, a joint venture with BP. Additionally, a number of companies including Cathay Industrial Biotech, Ltd., Green Biologics Ltd., METabolic Explorer, S.A., TetraVitae Bioscience, Inc. and Cobalt Technologies, Inc. are developing n-butanol production capability from a variety of renewable feedstocks.

In the plastics, fibers, rubber and other polymers markets, we face competition from incumbent petroleum-derived products, other renewable isobutanol producers and renewable n-butanol producers. Our competitive position versus the incumbent petroleum-derived products and other renewable butanol producers may not be favorable. Petroleum-derived products have dominated the market for many years and there is substantial existing infrastructure for production from petroleum sources, which may impede our ability to establish a position in these markets. Other isobutanol and n-butanol companies may develop technologies that prove more effective than our isobutanol production technology, or such companies may be more adept at marketing their production. Additionally, one small company in France, Global Bioenergies, S.A., is pursuing the production of isobutylene from renewable carbohydrates directly. Since conversion of isobutanol to butenes such as isobutylene is a key step in

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### **Risk factors**

producing many plastics, fibers, rubber and other polymers from our isobutanol, this direct production of renewable isobutylene, if successful, could limit our opportunities in these markets.

In the gasoline blendstock market, we will compete with renewable ethanol producers (including those working to produce ethanol from cellulosic feedstocks), producers of alkylate from petroleum and producers of other blendstocks, all of whom may reduce our ability to obtain market share or maintain our price levels. For example, Coskata, Inc. is developing a hybrid thermochemical-biocatalytic process to produce ethanol from a variety of feedstocks. If any of these competitors succeed in producing blendstocks more efficiently, in higher volumes or offering superior performance than our isobutanol, our financial performance may suffer. Furthermore, if our competitors have more success marketing their products or reach development or supply agreements with major customers, our competitive position may also be harmed.

In the production of other cellulosic biofuels, key competitors include Shell Oil Company, BP, DuPont-Danisco Cellulosic Ethanol LLC, Abengoa Bioenergy, S.A., POET, LLC, ICM, Mascoma Corporation, Range Fuels Inc., Inbicon A/S, INEOS New Planet BioEnergy LLC, Coskata, Inc., Archer Daniels Midland Company, BlueFire Ethanol, Inc., KL Energy Corporation, ZeaChem Inc., Iogen Corporation, Qteros, Inc., AE Biofuels, Inc. and many smaller start-up companies. If these companies are successful in establishing low cost cellulosic ethanol or other fuel production, it could negatively impact the market for our isobutanol as a gasoline blendstock.

In the markets for the hydrocarbon fuels that we plan to produce from our isobutanol, we will face competition from the incumbent petroleum-based fuels industry. The incumbent petroleum-based fuels industry makes the vast majority of the world's gasoline, jet and diesel fuels and blendstocks. It is a mature industry with a substantial base of infrastructure for the production and distribution of petroleum-derived products. The size, established infrastructure and significant resources of many companies in this industry may put us at a substantial competitive disadvantage, and delay or prevent the establishment and growth of our business in the market for hydrocarbon fuels.

Biofuels companies may also provide substantial competition in the hydrocarbon fuels market. With respect to production of renewable gasoline, biofuels competitors are numerous and include both large established companies and numerous start-ups. For example, Virent Energy Systems, Inc. has developed a process for making gasoline and gasoline blendstocks and Kior, Inc. has developed a technology platform to convert biomass into renewable crude oil. Many other competitors may do so as well. In the jet fuel market, we will face competition from companies such as Synthetic Genomics, Inc., Solazyme, Inc., Sapphire Energy, Inc. and Exxon-Mobil Corporation that are pursuing production of jet fuel from algae-based technology. LS9, Inc. (LS9) and others are also targeting production of jet fuels from renewable biomass. We may also face competition from companies working to produce jet fuel from hydrogenated fatty acid methyl esters. In the diesel fuels market, competitors such as Amyris Inc. and LS9 have developed technologies for production of alternative hydrocarbon diesel fuel.

In the plastics, fibers, rubber and other polymers markets and the hydrocarbon fuels market, we expect to face vigorous competition from existing technologies. The companies we may compete with may have significantly greater access to resources, far more industry experience and/or more established sales and marketing networks. Additionally, since we do not plan to produce most of these products directly, we depend on the willingness of potential customers to purchase and convert our isobutanol into their products. These potential customers generally have well-developed manufacturing processes and arrangements with suppliers of the chemical components of their products and may have a resistance to changing these processes and components. These potential customers frequently impose lengthy and

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complex product qualification procedures on their suppliers, influenced by consumer preference, manufacturing considerations such as process changes and capital and other costs associated with transitioning to alternative components, supplier operating history, regulatory issues, product liability and other factors, many of which are unknown to, or not well understood by, us. Satisfying these processes may take many months or years. If we are unable to convince these potential customers that our isobutanol is comparable or superior to the alternatives that they currently use, we will not be successful in entering these markets and our business will be adversely affected.

We also face challenges in marketing our isobutanol. Though we intend to enhance our competitiveness through partnerships and joint development agreements, some competitors may gain an advantage by securing more valuable partnerships for developing their hydrocarbon products than we are able to obtain. Such partners could include major petrochemical, refiner or end-user companies. Additionally, petrochemical companies may develop alternative pathways for hydrocarbon production that may be less expensive, and may utilize more readily available infrastructure than that used to convert our isobutanol into hydrocarbon products.

We plan to enter into partnerships through which we will sell significant volumes of our isobutanol to partners who will convert it into useful hydrocarbons or use it as a fuel or fuel blendstock. However, if any of these partners instead negotiate supply agreements with other buyers for the isobutanol they purchase from us, or sell it into the open market, they may become competitors of ours in the field of isobutanol sales. This could significantly reduce our profitability and hinder our ability to negotiate future supply agreements for our isobutanol, which could have an adverse effect on our performance.

Our ability to compete successfully will depend on our ability to develop proprietary products that reach the market in a timely manner and are technologically superior to and/or are less expensive than other products on the market. Many of our competitors have substantially greater production, financial, research and development, personnel and marketing resources than we do. In addition, certain of our competitors may also benefit from local government subsidies and other incentives that are not available to us. As a result, our competitors may be able to develop competing and/or superior technologies and processes, and compete more aggressively and sustain that competition over a longer period of time than we could. Our technologies and products may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of our competitors. As more companies develop new intellectual property in our markets, the possibility of a competitor acquiring patent or other rights that may limit our products or potential products increases, which could lead to litigation. Furthermore, to secure purchase agreements from certain customers, we may be required to enter into exclusive supply contracts, which could limit our ability to further expand our sales to new customers. Likewise, major potential customers may be locked into long-term, exclusive agreements with our competitors, which could inhibit our ability to compete for their business.

In addition, various governments have recently announced a number of spending programs focused on the development of clean technologies, including alternatives to petroleum-based fuels and the reduction of carbon emissions. Such spending programs could lead to increased funding for our competitors or a rapid increase in the number of competitors within those markets.

Our limited resources relative to many of our competitors may cause us to fail to anticipate or respond adequately to new developments and other competitive pressures. This failure could reduce our competitiveness and market share, adversely affect our results of operations and financial position and prevent us from obtaining or maintaining profitability.

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### **Risk factors**

#### **The terms of our loan and security agreements with TriplePoint may restrict our ability to engage in certain transactions.**

In August 2010, we entered into two loan and security agreements with TriplePoint, one in which we borrowed \$5.0 million and another in which our wholly owned subsidiary, Gevo Development, LLC, borrowed \$12.5 million to finance its acquisition of Agri-Energy (the Agri-Energy Loan Agreement ), each of which has since been amended. We expect to repay the \$5.0 million facility with the proceeds of this offering. In October 2011, the Agri-Energy Loan Agreement was amended to provide Agri-Energy with additional term loan facilities of up to \$15.0 million to pay a portion of the costs, expenses, and other amounts associated with the retrofit of Agri-Energy Facility to produce isobutanol. Pursuant to the terms of these loan and security agreements, we cannot engage in certain actions, including disposing of certain assets, granting or otherwise allowing the imposition of a lien against certain assets, incurring certain kinds of additional indebtedness or acquiring or merging with other entities unless we receive the prior approval of TriplePoint. If TriplePoint does not consent to any of the actions that we desire to take, we could be prohibited from engaging in transactions which could be beneficial to our business and our stockholders or could be forced to pay the outstanding balance of the loan(s) in full. As of March 31, 2012, the aggregate outstanding principal and final payments under the loans from TriplePoint was approximately \$34.8 million.

#### **Business interruptions could delay us in the process of developing our products and could disrupt our sales.**

We are vulnerable to natural disasters and other events that could disrupt our operations, such as riots, civil disturbances, war, terrorist acts, floods, infections in our laboratory or production facilities or those of our contract manufacturers and other events beyond our control. We do not have a detailed disaster recovery plan. In addition, we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our cash flows and success as an overall business. Furthermore, ICM may terminate our commercialization agreement if a force majeure event interrupts our operations for a specified period of time.

#### **We engage in hedging transactions, which could harm our business.**

We currently engage in hedging transactions to offset some of the effects of volatility in commodity prices. We expect to engage in similar transactions once we begin commercial isobutanol production. We generally follow a policy of using exchange-traded futures contracts to reduce our net position in agricultural commodity inventories and forward cash purchase contracts to manage price risk. Hedging activities may cause us to suffer losses, such as if we purchase a position in a declining market or sell a position in a rising market. Furthermore, hedging exposes us to the risk that the other party to a hedging contract defaults on its obligation. We may vary the hedging strategies we undertake, which could leave us more vulnerable to increases in commodity prices or decreases in the prices of isobutanol, distiller s grains, iDGs or ethanol. Losses from hedging activities and changes in hedging strategy could have a material adverse effect on our operations.

#### **Ethical, legal and social concerns about genetically engineered products and processes, and similar concerns about feedstocks grown on land that could be used for food production, could limit or prevent the use of our products, processes and technologies and limit our revenues.**

Some of our processes involve the use of genetically engineered organisms or genetic engineering technologies. Additionally, our feedstocks may be grown on land that could be used for food production, which subjects our feedstock sources to food versus fuel concerns. If we are not able to overcome the ethical, legal and social concerns relating to genetic engineering or food versus fuel, our products and

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### **Risk factors**

processes may not be accepted. Any of the risks discussed below could result in increased expenses, delays or other impediments to our programs or the public acceptance and commercialization of products and processes dependent on our technologies or inventions. Our ability to develop and commercialize one or more of our technologies, products, or processes could be limited by the following factors:

- Ø public attitudes about the safety and environmental hazards of, and ethical concerns over, genetic research and genetically engineered products and processes, which could influence public acceptance of our technologies, products and processes;
- Ø public attitudes regarding, and potential changes to laws governing ownership of genetic material, which could harm our intellectual property rights with respect to our genetic material and discourage others from supporting, developing or commercializing our products, processes and technologies;
- Ø public attitudes and ethical concerns surrounding production of feedstocks on land which could be used to grow food, which could influence public acceptance of our technologies, products and processes;
- Ø governmental reaction to negative publicity concerning genetically engineered organisms, which could result in greater government regulation of genetic research and derivative products; and
- Ø governmental reaction to negative publicity concerning feedstocks produced on land which could be used to grow food, which could result in greater government regulation of feedstock sources.

The subjects of genetically engineered organisms and food versus fuel have received negative publicity, which has aroused public debate. This adverse publicity could lead to greater regulation and trade restrictions on imports of genetically engineered products or feedstocks grown on land suitable for food production.

The biocatalysts that we develop have significantly enhanced characteristics compared to those found in naturally occurring enzymes or microbes. While we produce our biocatalysts only for use in a controlled industrial environment, the release of such biocatalysts into uncontrolled environments could have unintended consequences. Any adverse effect resulting from such a release could have a material adverse effect on our business and financial condition, and we may be exposed to liability for any resulting harm.

### **Compliance with stringent laws and regulations may be time consuming and costly, which could adversely affect the commercialization of our biofuels products.**

Any biofuels developed using our technologies will need to meet a significant number of regulations and standards, including regulations imposed by the U.S. Department of Transportation, the EPA, the FAA, various state agencies and others. Any failure to comply, or delays in compliance, with the various existing and evolving industry regulations and standards could prevent or delay the commercialization of any biofuels developed using our technologies and subject us to fines and other penalties.

### **We use hazardous materials in our business and we must comply with environmental laws and regulations. Any claims relating to improper handling, storage or disposal of these materials or noncompliance with applicable laws and regulations could be time consuming and costly and could adversely affect our business and results of operations.**

Our research and development processes involve the use of hazardous materials, including chemical, radioactive and biological materials. Our operations also produce hazardous waste. We cannot eliminate entirely the risk of accidental contamination or discharge and any resultant injury

from these materials. Federal, state and local laws and regulations govern the use, manufacture, storage, handling and disposal

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### **Risk factors**

of, and human exposure to, these materials. We may be sued for any injury or contamination that results from our use or the use by third parties of these materials, and our liability may exceed our total assets. Although we believe that our activities conform in all material respects with environmental laws, there can be no assurance that violations of environmental, health and safety laws will not occur in the future as a result of human error, accident, equipment failure or other causes. Compliance with applicable environmental laws and regulations may be expensive, and the failure to comply with past, present, or future laws could result in the imposition of fines, third-party property damage, product liability and personal injury claims, investigation and remediation costs, the suspension of production or a cessation of operations, and our liability may exceed our total assets. Liability under environmental laws can be joint and several and without regard to comparative fault. Environmental laws could become more stringent over time imposing greater compliance costs and increasing risks and penalties associated with violations, which could impair our research, development or production efforts and harm our business.

#### **As isobutanol has not previously been used as a commercial fuel in significant amounts, its use subjects us to product liability risks, and we may have difficulties obtaining product liability insurance.**

Isobutanol has not previously been used as a commercial fuel and research regarding its impact on engines and distribution infrastructure is ongoing. Though we intend to test our isobutanol further before its commercialization, there is a risk that it may damage engines or otherwise fail to perform as expected. If isobutanol degrades the performance or reduces the lifecycle of engines, or causes them to fail to meet emissions standards, market acceptance could be slowed or stopped, and we could be subject to product liability claims. Furthermore, due to isobutanol's lack of commercial history as a fuel, we are uncertain as to whether we will be able to acquire product liability insurance on reasonable terms, or at all. A significant product liability lawsuit could substantially impair our production efforts and could have a material adverse effect on our business, reputation, financial condition and results of operations.

#### **We may not be able to use some or all of our net operating loss carry-forwards to offset future income.**

In general, under Section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an ownership change is subject to limitation on its ability to utilize its pre-change net operating loss carry-forwards, or net operating losses, to offset future taxable income. We may have experienced one or more ownership changes in prior years, and the issuance of shares in connection with our initial public offering may itself have triggered an ownership change; hence, our ability to utilize our net operating losses to offset income if we attain profitability may be limited. In addition, these loss carry-forwards expire at various times over the next 20 years. We believe that it is more likely than not that these carry-forwards will not result in any material future tax savings.

#### **Enacted and proposed changes in securities laws and regulations have increased our costs and may continue to increase our costs in the future.**

In recent years, there have been several changes in laws, rules, regulations and standards relating to corporate governance and public disclosure, including the Dodd-Frank Wall Street Reform and Consumer Protection Act (the Dodd-Frank Act), the Sarbanes-Oxley Act of 2002 and various other new regulations promulgated by the SEC and rules promulgated by the national securities exchanges.

The Dodd-Frank Act, enacted in July 2010, expands federal regulation of corporate governance matters and imposes requirements on publicly-held companies, including us, to, among other things, provide stockholders with a periodic advisory vote on executive compensation and also requires compensation committee reforms and enhanced pay-for-performance disclosures. While some provisions of the Dodd-Frank Act are effective upon enactment, others will be implemented upon the SEC's adoption of related

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### **Risk factors**

rules and regulations. The scope and timing of the adoption of such rules and regulations is uncertain and accordingly, the cost of compliance with the Dodd-Frank Act is also uncertain.

These and other new or changed laws, rules, regulations and standards are, or will be, subject to varying interpretations in many cases due to their lack of specificity. As a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies, which could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. Our efforts to comply with evolving laws, regulations and standards are likely to continue to result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. Further, compliance with new and existing laws, rules, regulations and standards may make it more difficult and expensive for us to maintain director and officer liability insurance, and we may be required to accept reduced coverage or incur substantially higher costs to obtain coverage. Members of our board of directors and our principal executive officer and principal financial officer could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified directors and executive officers, which could harm our business. We continually evaluate and monitor regulatory developments and cannot estimate the timing or magnitude of additional costs we may incur as a result.

**If we fail to maintain an effective system of internal controls, we might not be able to report our financial results accurately or prevent fraud; in that case, our stockholders could lose confidence in our financial reporting, which would harm our business and could negatively impact the price of our stock.**

Effective internal controls are necessary for us to provide reliable financial reports and prevent fraud. In addition, Section 404 of the Sarbanes-Oxley Act of 2002 ( Section 404 ) requires us to evaluate and report on our internal control over financial reporting and have our chief executive officer and chief financial officer certify as to the accuracy and completeness of our financial reports. The process of implementing our internal controls and complying with Section 404 is expensive and time consuming, and requires significant attention of management. We cannot be certain that these measures will ensure that we implement and maintain adequate controls over our financial processes and reporting in the future. Even if we conclude that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our reporting obligations.

Our management has concluded that there are no material weaknesses in our internal controls over financial reporting as of March 31, 2012. However, there can be no assurance that our controls over financial processes and reporting will be effective in the future or that additional material weaknesses or significant deficiencies in our internal controls will not be discovered in the future. If we, or our independent registered public accounting firm, discover a material weakness, the disclosure of that fact, even if quickly remedied, could reduce the market's confidence in our financial statements and harm our stock price. In addition, a delay in compliance with Section 404 could subject us to a variety of administrative sanctions, including SEC action, ineligibility for short form resale registration, the suspension or delisting of our common stock from the stock exchange on which it is listed and the inability of registered broker-dealers to make a market in our common stock, which would further reduce our stock price and could harm our business.

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## Cautionary note regarding forward-looking statements

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein contain forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements may include, but are not limited to, statements relating to the achievement of advances in our technology platform, the success of our retrofit production model, the availability of suitable and cost-competitive feedstocks, our ability to gain market acceptance for our products, the expected cost-competitiveness and relative performance attributes of our isobutanol and the products derived from it, additional competition, the future price and volatility of petroleum and products derived from petroleum and statements regarding our intended uses of the proceeds of the securities offered hereby. In some cases, you can identify forward-looking statements by terminology such as may, will, should, expect, plan, anticipate, believe, estimate, predict, continue, the negative of such terms or other comparable terminology.

Forward-looking statements reflect our current views about future events, are based on assumptions, and are subject to known and unknown risks and uncertainties. Many important factors could cause actual results or achievements to differ materially from the results, performance or achievements expressed in or implied by our forward-looking statements, including the factors listed below. Many of the factors that will determine future results, performance or achievements are beyond our ability to control or predict. The following are important factors, among others, that could cause actual results, performance or achievements to differ materially from the results or achievements reflected in our forward-looking statements:

- Ø an inability to successfully commercialize isobutanol and the products derived from it;
- Ø an inability to produce commercial quantities of isobutanol in a timely and economic manner;
- Ø unexpected delays, operational difficulties, cost-overruns or failures in the retrofit process;
- Ø a failure to successfully identify and acquire access to additional facilities suitable for efficient retrofitting;
- Ø a failure to market our isobutanol to potential customers;
- Ø fluctuations in the market price of petroleum;
- Ø fluctuations in the market price of corn and other feedstocks;
- Ø an inability to obtain regulatory approval for the use of our isobutanol in our target markets;

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- Ø a failure to adequately protect our intellectual property, or the loss of some of our intellectual property rights through costly litigation or administrative proceedings;
  
  - Ø a failure to transition our preliminary commitments into definitive supply and distribution agreements or to negotiate sufficient long-term supply agreements for our production of isobutanol; and
  
  - Ø general economic conditions and inflation, interest rate movements and access to capital.
- The forward-looking statements contained herein reflect our views and assumptions only as of the date such forward-looking statements are made. You should not place undue reliance on forward-looking

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**Cautionary note regarding forward-looking statements**

statements. Except as required by law, we assume no responsibility for updating any forward-looking statements nor do we intend to do so. Our actual results, performance or achievements could differ materially from the results expressed in, or implied by, these forward-looking statements. The risks included in this section are not exhaustive. Additional factors that could cause actual results to differ materially from those described in the forward-looking statements are set forth in the section entitled **Risk factors** beginning on page S-21.

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**Table of Contents****Ratio of earnings to fixed charges**

The following table sets forth our ratio of earnings to fixed charges for the periods indicated. Our earnings are inadequate to cover fixed charges, and the dollar amount of the coverage deficiency for all periods is provided below (dollars in thousands):

	<b>Three Months Ended</b>		<b>Years Ended December 31,</b>			
	<b>March 31, 2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Ratio of Earnings to Fixed Charges(1)</b>						
Deficiency of Earnings Available to Cover Fixed Charges	\$ (19,648)	\$ (48,511)	\$ (40,112)	\$ (19,885)	\$ (14,542)	\$ (7,226)

- (1) The ratios of earnings to fixed charges were computed by dividing earnings by fixed charges. For this purpose, earnings consist of earnings from continuing operations and fixed charges (not including capitalized interest). Fixed charges consist of interest expense, amortization and expensing of debt expense, interest component of rent expense and capitalized interest. This calculation results in less than one-to-one coverage, and the dollar amount of the deficiency is set forth in the table above.

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**Table of Contents****Description of existing indebtedness****GEVO LOAN AGREEMENT**

In August 2010, concurrent with the execution of the agreement to acquire Agri-Energy, we entered into a loan and security agreement with TriplePoint (the Gevo Loan Agreement), pursuant to which we borrowed \$5.0 million. We expect to repay the Gevo Loan Agreement with the proceeds of this offering. The Gevo Loan Agreement includes customary affirmative and negative covenants for agreements of this type and events of default, including, disposing of certain assets, granting or otherwise allowing the imposition of a lien against certain assets, incurring certain amounts of additional indebtedness, or acquiring or merging with another entity, excluding Agri-Energy, unless we receive the prior approval of TriplePoint. The aggregate amount outstanding under the Gevo Loan Agreement bears interest at a rate equal to 13%, is subject to an end-of-term payment equal to 8% of the amount borrowed and is secured by substantially all of the assets of Gevo, Inc., other than our intellectual property. This loan is also secured by substantially all of the assets of Agri-Energy. Additionally, under the terms of each of (i) the Gevo Loan Agreement and (ii) Gevo, Inc.'s guarantee of Agri-Energy's obligations under the Original Agri-Energy Loan Agreement described below, we are prohibited from granting a security interest in our intellectual property assets to any other entity until both TriplePoint loans are paid in full. The loan matures on August 31, 2014, and provides for interest-only payments during the first 24 months. An additional interest-only period of six months may be elected in the event that we begin producing isobutanol at our Agri-Energy Facility by June 30, 2012. At March 31, 2012, we were in compliance with the debt covenants under the Gevo Loan Agreement.

**ORIGINAL AGRi-ENERGY LOAN AGREEMENT**

In August 2010, Gevo Development borrowed \$12.5 million from TriplePoint to finance its acquisition of Agri-Energy. In September 2010, upon completion of the acquisition, the loan and security agreement was amended to make Agri-Energy the borrower under the facility. This loan and security agreement (the Original Agri-Energy Loan Agreement) includes customary affirmative and negative covenants for agreements of this type and events of default. The aggregate amount outstanding under the Original Agri-Energy Loan Agreement bears interest at a rate equal to 13% and is subject to an end-of-term payment equal to 8% of the amount borrowed. The loan is secured by the equity interests of Agri-Energy held by Gevo Development and substantially all the assets of Agri-Energy. The loan matures on September 1, 2014, and provides for interest-only payments during the first 24 months. An additional interest-only period of six months may be elected in the event that we begin producing isobutanol at our Agri-Energy Facility by June 30, 2012. The loan is guaranteed by Gevo, Inc. pursuant to a continuing guaranty executed by Gevo, Inc. in favor of TriplePoint, which is secured by substantially all of the assets of Gevo, Inc., other than its intellectual property. At March 31, 2012, we were in compliance with the debt covenants under the Original Agri-Energy Loan Agreement.

**AMENDED AGRi-ENERGY LOAN AGREEMENT**

In October 2011, Agri-Energy entered into an amended and restated loan and security agreement (the Amended Agri-Energy Loan Agreement) with TriplePoint which amends and restates the Original Agri-Energy Loan Agreement. The Amended Agri-Energy Loan Agreement includes customary affirmative and negative covenants for agreements of this type and events of default. The Amended Agri-Energy Loan Agreement provides Agri-Energy with additional term loan facilities of up to \$15.0 million (the New Loan) (which amount is in addition to the existing \$12.5 million term loan provided under the Original Agri-Energy Loan Agreement, which term loan remains in place under the Amended Agri-Energy Loan Agreement), the proceeds of which will be used to pay a portion of the costs, expenses, and

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**Description of existing indebtedness**

other amounts associated with the retrofit of the Agri-Energy Facility to produce isobutanol. The loan matures and will be paid off on October 31, 2015. The aggregate amount outstanding under the New Loan bears interest at a rate of 11% and is subject to an end-of-term payment equal to 5.75% of the amount borrowed. The New Loan provides for interest-only payments through July 1, 2012 and an additional interest-only period of six months on the New Loan may be elected in the event that we have received net offering proceeds of at least \$75.0 million from one or more secondary equity offerings by June 30, 2012. Any borrowings under the New Loan that are in excess of 50% of the amount incurred for the retrofit the Agri-Energy Facility must be immediately repaid to TriplePoint.

On October 20, 2011, Agri-Energy borrowed \$10.0 million under the Amended Agri-Energy Loan Agreement. On January 6, 2012, Agri-Energy borrowed an additional \$5.0 million under this facility, bringing the total borrowed under the New Loan at March 31, 2012 to \$15.0 million. Upon our request and the additional approval of TriplePoint, we may borrow an additional \$5.0 million under the Amended Agri-Energy Loan Agreement increasing the maximum size of the New Loan to \$20.0 million. At March 31, 2012, we were in compliance with the debt covenants under the Amended Agri-Energy Loan Agreement.

The Amended Agri-Energy Loan Agreement provides that Agri-Energy will secure all of its obligations under the Amended Agri-Energy Loan Agreement and any other loan documents by granting to TriplePoint a security interest in and lien upon all or substantially all of its assets. Gevo, Inc. has guaranteed Agri-Energy's obligations under the Amended Agri-Energy Loan Agreement. As additional security, concurrently with the execution of the Amended Agri-Energy Loan Agreement, (i) Gevo Development entered into a limited recourse continuing guaranty in favor of TriplePoint, (ii) Gevo Development entered into an amended and restated limited recourse membership interest pledge agreement in favor of TriplePoint, pursuant to which it pledged the membership interests of Agri-Energy as collateral to secure the obligations under its guaranty, and (iii) Gevo, Inc. entered into an amendment to its security agreement with TriplePoint, which secures its guarantee of Agri-Energy's obligations (including up to \$32.5 million in term loans) under the Amended Agri-Energy Loan Agreement.

Additionally, concurrent with the execution of the Amended Agri-Energy Loan Agreement, we entered into a warrant agreement with TriplePoint pursuant to which TriplePoint is entitled to purchase up to 188,442 shares of our common stock on the terms and subject to the conditions set forth in the warrant agreement, at a price per share of \$7.96, subject to adjustment. The warrants may be exercised until October 20, 2018.

In the event that this offering of notes is consummated, the Amended Agri-Energy Loan Agreement (and, as applicable, the associated guaranty and security agreements with Gevo, Inc.) will be further amended to: (i) permit this offering of notes; (ii) eliminate Agri-Energy's options to elect additional interest-only periods upon the achievement of the milestones described above; (iii) permit Agri-Energy to make dividends and distributions to Gevo, Inc. for the purpose of paying regularly scheduled interest payments on the notes; and (iv) add, as an additional event of default, the payment, repurchase or redemption of the notes or of amounts payable in connection therewith other than (a) the payment of regularly scheduled interest on the notes, (b) the conversion of all or any portion of the notes into common stock of Gevo, Inc., (c) the making of cash payments in lieu of issuing fractional shares in connection with any conversion described in clause (b) above, and (d) payments to the trustee of reasonable and customary compensation and expense reimbursement with respect to the notes.

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## Use of proceeds

We expect the net proceeds from this offering to be approximately \$36.5 million (or \$41.2 million if the underwriters exercise in full their option to purchase additional notes), after deducting underwriting discounts and commissions, as described in Underwriting, and estimated offering expenses payable by us. In addition, we estimate that the net proceeds from the concurrent common stock offering, after deducting estimated underwriting discounts and commissions and offering expenses, will be approximately \$57.6 million (or approximately \$66.3 million if the underwriters for the concurrent common stock offering exercise in full their option to purchase additional shares of common stock). However, this offering is not contingent upon the concurrent common stock offering and we cannot assure you that we will complete the concurrent common stock offering.

We currently intend to use all or a portion of the net proceeds of this offering and the concurrent common stock offering, if any, together with existing cash and cash equivalents, to complete the retrofit of the Agri-Energy Facility that we acquired in September 2010. A portion of the net proceeds of this offering and the concurrent common stock offering, if any, may be used for detailed design work in preparation for the retrofit of the Redfield Facility to isobutanol production pursuant to the joint venture agreement that we entered into in June 2011. We also intend to use a portion of the net proceeds of this offering to repay \$5.0 million in outstanding long-term debt obligations under our loan agreements with TriplePoint, which bear interest at a rate equal to 13% and mature on August 31, 2014, and may also use a portion of the net proceeds of this offering and the concurrent common stock offering, if any, to fund working capital and other general corporate purposes, which may include paying down additional long-term debt obligations and expenses associated with litigation.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering and the concurrent common stock offering, if any. Accordingly, we will retain broad discretion over the use of such proceeds. Pending the use of the net proceeds from this offering and the concurrent common stock offering, if any, as described above, we intend to invest the net proceeds in demand deposit accounts or short-term, investment-grade securities.

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**Table of Contents****Capitalization**

The following table sets forth our cash and cash equivalents and capitalization as of March 31, 2012:

- ∅ on an actual basis;
- ∅ as adjusted to give effect to the issuance and sale of \$40,000,000 aggregate principal amount of 7.5% convertible notes due 2022 in this offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, the application of the net proceeds therefrom as described under the heading "Use of proceeds" and the repayment of \$5.0 million in outstanding long-term debt obligations owed to TriplePoint Capital LLC; and
- ∅ as further adjusted to give effect to the receipt of estimated net proceeds of \$57,599,000 from the concurrent common stock offering at a public offering price of \$4.95 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, and the application of the net proceeds therefrom as described under the heading "Use of proceeds."

The following table should be read in conjunction with our consolidated financial statements and related notes, which are incorporated by reference into this prospectus supplement.

	Actual	As Adjusted	As Further Adjusted
Cash and cash equivalents	\$ 73,622,000	\$ 105,158,500	\$ 162,757,500
Debt:			
Secured debt, including current portion	\$ 32,881,000	\$ 27,881,000	\$ 27,881,000
7.5% convertible senior notes due 2022	\$	\$ 40,000,000	\$ 40,000,000
<b>Total debt</b>	<b>\$ 32,881,000</b>	<b>\$ 67,881,000</b>	<b>\$ 67,881,000</b>
Stockholders' equity:			
Preferred Stock, \$0.01 par value per share; 5,000,000 shares authorized; no shares issued and outstanding, actual; no shares issued and outstanding, as adjusted			
Common stock, \$0.01 par value per share; 100,000,000 shares authorized; 26,758,924 shares issued and outstanding, actual and as adjusted; 39,289,598 shares issued and outstanding, as further adjusted	\$ 267,000	\$ 267,000	\$ 392,000
Additional paid-in capital	\$ 230,883,000	\$ 230,883,000	\$ 288,357,000
Deficit accumulated during development stage	\$ (153,942,000)	\$ (153,942,000)	\$ (153,942,000)
<b>Total stockholders' equity</b>	<b>\$ 77,208,000</b>	<b>\$ 77,208,000</b>	<b>\$ 134,807,000</b>
<b>Total capitalization</b>	<b>\$ 110,089,000</b>	<b>\$ 145,089,000</b>	<b>\$ 202,688,000</b>

The number of shares of our common stock to be outstanding immediately after the closing of this offering is based on 26,789,598 shares of common stock outstanding as of June 15, 2012 and excludes, as of that date:

- Ø 3,462,295 shares of common stock issuable upon the exercise of outstanding stock options at a weighted average exercise price of \$5.90 per share;
- Ø 1,229,998 shares of common stock issuable upon the exercise of outstanding common stock warrants at a weighted average price of \$4.60 per share;
- Ø 1,089,706 shares of common stock available for future grant under the 2010 Plan;
- Ø 1,276,879 shares of common stock available for issuance pursuant to our ESPP; and
- Ø shares of common stock reserved for issuance upon conversion of the notes.

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## Description of notes

We will issue the notes under an indenture to be dated as of July 5, 2012 between us and Wells Fargo Bank, National Association, as trustee, as supplemented by a supplemental indenture thereto, to be dated as of July 5, 2012, relating to the notes. We refer to the indenture as so supplemented as the indenture. The terms of the notes include those provided in the indenture and those made part of the indenture by reference to the Trust Indenture Act.

The following description is a summary of the material provisions of the notes and the indenture. It does not purport to be complete. This summary is subject to and is qualified by reference to all the provisions of the notes and the indenture, including the definitions of certain terms used therein. We urge you to read these documents because they, and not this description, define your rights as a holder of the notes. A copy of the form of indenture will be available upon request to us and is on file with the Securities and Exchange Commission.

The following description of the particular terms of the notes supplements and, to the extent inconsistent therewith, replaces the description of the general terms and provisions of the debt securities set forth in the accompanying prospectus, to which reference is hereby made. Terms not defined in this description have the meanings given to them in the indenture. In this section, the words we, us, our, Gevo or the Company do include any current or future subsidiary of Gevo, Inc., unless we specify otherwise.

### **GENERAL**

The notes will:

- Ø initially be limited to \$40,000,000 principal amount (or a total of \$45,000,000 principal amount with the underwriters' exercise of their over-allotment option in full);
- Ø bear interest at a rate of 7.5% per year, payable semi-annually in arrears, on January 1 and July 1 of each year, commencing on January 1, 2013;
- Ø be our general unsecured senior obligations, ranking equally in right of payment with all of our future senior unsecured indebtedness, if any, and senior in right of payment to all of our future subordinated indebtedness, if any. The notes will be effectively junior to our existing and future secured indebtedness to the extent of the value of the assets securing such indebtedness and structurally subordinated in right of payment to all future indebtedness and other liabilities (including trade payables) of any current and future subsidiary of the Company;
- Ø be convertible by you at any time prior to the close of business on the third business day immediately preceding the maturity date into shares of our common stock initially based on a conversion rate of 175.6697 shares of our common stock per \$1,000 principal amount of notes, which represents an initial conversion price of approximately \$5.69 per share. In the event of certain types of fundamental changes, we will increase the conversion rate by a number of additional shares as described under Adjustment to Conversion Rate Upon Conversion Upon Make-Whole Fundamental Changes. If you elect to convert some or all of your notes on or after January 1, 2013 but prior to July 1, 2017, in addition to the consideration received as described under Conversion Rights, you will receive a coupon make-whole payment for the notes being converted. We may pay any coupon make-whole payments either in cash or in our common stock, at our election;



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### Description of notes

Ø be subject to repurchase by us, at your option, if a fundamental change (as defined under Repurchase at the Option of the Holder Upon a Fundamental Change ) occurs, at a repurchase price equal to 100% of the principal amount of the notes, plus any accrued and unpaid interest to, but not including, the repurchase date;

Ø be subject to repurchase by us, at your option, on July 1, 2017 at a purchase price in cash equal to 100% of the principal amount of the notes to be purchased, plus any accrued and unpaid interest to, but excluding, the purchase date, as described under Repurchase of Notes by the Company at the Option of the Holder ;

Ø be subject to redemption by us, at our option, at any time after July 1, 2015 but prior to July 1, 2017 at a redemption price in cash equal to 100% of the principal amount of the notes we redeem, provided that the last reported sale price of our common stock for 20 or more trading days in a period of 30 consecutive trading days ending on the trading day immediately prior to the date of the redemption notice exceeds 150% of the applicable conversion price in effect on each such trading day, as described under Redemption of Notes at the Company s Option Provisional Redemption by the Company ;

Ø be subject to redemption by us, at our option, at any time on or after July 1, 2017 at a redemption price in cash equal to 100% of the principal amount of the notes we redeem, plus accrued and unpaid interest to, but excluding, the redemption date, as described under Redemption of Notes at the Company s Option Optional Redemption by the Company ; and

Ø be due on July 1, 2022, unless earlier converted, repurchased or redeemed.

Other than restrictions described under Repurchase at the Option of the Holder Upon a Fundamental Change and Consolidation, Merger and Sale of Assets below, and except for the provisions set forth under Repurchase of Notes by the Company at the Option of the Holder, Conversion Rights or Adjustment to Conversion Rate Upon Conversion Upon Make-Whole Fundamental Changes, the indenture does not contain any covenants or other provisions designed to afford holders of the notes protection in the event of a highly leveraged transaction involving us or in the event of a decline in any credit rating that may have been assigned to the notes as the result of a takeover, recapitalization, highly leveraged transaction or similar restructuring involving us that could adversely affect such holders. In addition, neither we nor any of our subsidiaries will be restricted under the indenture from paying dividends, incurring indebtedness or issuing or repurchasing our securities.

No sinking fund is provided for the notes and the notes will not be subject to defeasance.

The notes initially will be issued in book-entry form only in minimum denominations of \$1,000 principal amount and whole multiples thereof. Beneficial interests in the notes will be shown on, and transfers of beneficial interests in the notes will be effected only through, records maintained by DTC or its nominee, and any such interests may not be exchanged for certificated notes except in limited circumstances. For information regarding conversion, registration of transfer and exchange of global notes held in DTC, see Form, Denomination and Registration below.

If certificated notes are issued, you may present them for conversion, registration of transfer and exchange, without service charge, at our office or agency, which initially will be the office or agency of the trustee. However, we or the trustee may require the holder to pay a sum sufficient to cover any tax, assessment or other governmental charge that may be imposed in connection with any registration of transfer or exchange of notes.

We may also from time to time repurchase the notes in open-market purchases or privately negotiated transactions without prior notice to holders.



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**Description of notes**

**RANKING**

The notes will be our general unsecured senior obligations that rank equal in right of payment with our future senior unsecured indebtedness, if any, senior in right of payment to our future subordinated indebtedness, if any, and structurally subordinated to the existing and future indebtedness and other liabilities of any of our current and future subsidiaries, including trade payables.

The notes will effectively rank junior to our secured indebtedness to the extent of the assets securing such indebtedness. As of March 31, 2012, we had outstanding secured indebtedness of \$35.5 million. In the event of our bankruptcy, liquidation, reorganization or other winding up, our assets that secure secured indebtedness will be available to pay obligations on the notes only after all indebtedness under such secured indebtedness has been repaid in full. We advise you that there may not be sufficient assets remaining to pay amounts due on any or all of the notes then outstanding.

**PAYMENT AT MATURITY**

On the maturity date, each holder will be entitled to receive on such date \$1,000 in cash for each \$1,000 in principal amount of notes, together with accrued and unpaid interest to, but not including, the maturity date, unless earlier converted, repurchased or redeemed. With respect to global notes, principal and interest will be paid to DTC in immediately available funds. With respect to any certificated notes, principal and interest will be payable at our office or agency, which initially will be the office or agency of the trustee.

**INTEREST**

The notes will bear interest at a rate of 7.5% per year. Interest will accrue from July 5, 2012, which is the date of issuance, or from the most recent date to which interest has been paid or duly provided for. We will pay interest semi-annually in arrears on January 1 and July 1 of each year, beginning on January 1, 2013, to holders of record at the close of business on the preceding December 15 or June 15, respectively. However, there are two exceptions to the preceding sentence:

- ∅ we will not pay in cash accrued interest on any notes when they are converted, except as described under **Conversion Rights** ; and
- ∅ on the maturity date, we will pay accrued and unpaid interest only to the person to whom we pay the principal amount (which may or may not be the holder of record on the relevant record date).  
We will pay or cause to be paid interest on:
  - ∅ global notes to DTC in immediately available funds;
  - ∅ any certificated notes having a principal amount of less than \$1,000,000, by check mailed to the holders of those notes; provided, however, at maturity, interest will be payable as described under **Payment at Maturity** ; and
  - ∅ any certificated notes having a principal amount of \$1,000,000 or more, by wire transfer in immediately available funds at the election of the holders of those notes duly delivered to the trustee at least five business days prior to the relevant interest payment date; provided, however, at maturity, interest will be payable as described under **Payment at Maturity**.

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Interest on the notes for a full interest period will be computed on the basis of a 360-day year comprised of twelve 30-day months. If a payment date is not a business day, payment will be made on the next succeeding business day and no additional interest will accrue thereon.

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### **Description of notes**

Business day means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in New York City are authorized or obligated by law or executive order to close.

All references to interest in this prospectus supplement are deemed to include additional interest, if any, that accrues in connection with our failure to comply with our reporting obligations under the indenture, if applicable, as described under Events of Default; Notice and Waiver.

### **CONVERSION RIGHTS**

Holders may, subject to prior maturity, redemption or repurchase, convert each of their notes at an initial conversion rate of 175.6697 shares of common stock per \$1,000 principal amount of notes (equivalent to an initial conversion price of approximately \$5.69 per share of common stock) at any time prior to the close of business on the third business day immediately preceding the maturity date. A holder may convert fewer than all of such holder's notes so long as the notes converted are a multiple of \$1,000 principal amount.

The conversion rate and the corresponding conversion price in effect at any given time are referred to as the applicable conversion rate and the applicable conversion price, respectively, and will be subject to adjustment as described below. The conversion price at any given time will be computed by dividing \$1,000 by the applicable conversion rate at such time.

Except as provided in the next paragraph, upon conversion, you will not receive any additional cash payment or shares of common stock for accrued and unpaid interest on the notes. Upon conversion, accrued and unpaid interest to the conversion date is deemed to be paid in full rather than cancelled, extinguished or forfeited.

If you convert your notes after the close of business on a regular record date for an interest payment date but prior to the corresponding interest payment date, you will receive on the corresponding interest payment date the interest accrued and unpaid on your notes, notwithstanding your conversion of those notes prior to the interest payment date, assuming you were the holder of record on the corresponding record date. At the time you surrender your notes for conversion, whether or not you were the holder of record on the relevant date, you must pay us an amount equal to the interest that has accrued and will be paid on the notes being converted on the corresponding interest payment date; provided that no such payment need be made:

- Ø for conversions after the close of business on January 1, 2013 and before the close of business on June 30, 2017;
  - Ø for conversions after the close of business on June 15, 2022, which is the regular record date for the maturity date;
  - Ø if we have specified a fundamental change repurchase date that is after a regular record date and prior to the corresponding interest payment date;
  - Ø if we have specified a redemption date that is after a regular record date and prior to the corresponding interest payment date; or
  - Ø to the extent of any overdue interest, if overdue interest exists at the time of conversion with respect to such note.
- We will not issue fractional shares of our common stock upon conversion of notes. Instead, we will deliver cash, as described under Conversion Procedures.

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### **Description of notes**

If you have submitted any or all of your notes for repurchase, unless you have withdrawn such notes in a timely fashion, your conversion rights on the notes so subject to repurchase will expire at the close of business on the business day preceding the repurchase date, unless we default in the payment of the repurchase price. If you have submitted any or all of your notes for repurchase, such notes may be converted only if you submit a withdrawal notice, and if the notes are evidenced by a global note, you must comply with appropriate DTC procedures.

### **CONVERSION PROCEDURES**

If you hold a beneficial interest in a global note, to convert you must comply with DTC's procedures for converting a beneficial interest in a global note and, if required, pay funds equal to interest payable on the next interest payment date and all taxes or duties, if any.

If you hold a certificated note, to convert you must:

Ø complete and manually sign the conversion notice on the back of the note, or a facsimile of the conversion notice;

Ø deliver the conversion notice, which is irrevocable, and the note to the conversion agent;

Ø if required, furnish appropriate endorsements and transfer documents;

Ø if required, pay all transfer or similar taxes; and

Ø if required, pay funds equal to interest payable on the next interest payment date.

The date you comply with all of these requirements is the conversion date under the indenture.

If a holder converts notes, we will pay any documentary, stamp or similar issue or transfer tax due on the issuance of any shares of our common stock upon the conversion, unless the tax is due because the holder requests any shares to be issued in a name other than the holder's name, in which case the holder will pay that tax.

If a holder has already delivered a repurchase notice as described under Repurchase at the Option of the Holder Upon a Fundamental Change with respect to a note, the holder may not surrender that note for conversion until the holder has withdrawn the notice in accordance with the indenture.

Settlement in shares of our common stock will occur on the third trading day following the conversion date (or, if earlier, on the maturity date). We will deliver to the holder for each \$1,000 principal amount of the notes converted a number of shares of our common stock equal to the conversion rate in effect on the conversion date plus cash in lieu of fractional shares, if applicable. We will not issue fractional shares of common stock upon conversion of the notes and instead will pay a cash adjustment for fractional shares based on the closing sale price per share of our common stock on the trading day immediately preceding the conversion date.

### **COUPON MAKE-WHOLE PAYMENT UPON CONVERSION ON OR AFTER JANUARY 1, 2013 BUT PRIOR TO JULY 1, 2017**

If you elect to convert some or all of your notes on or after January 1, 2013 but prior to July 1, 2017, in addition to the consideration received as described under Conversion Rights you will receive a coupon make-whole payment for the notes being converted.



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**Description of notes**

This coupon make-whole payment will be equal to the sum of the present values of the lesser of:

Ø eight semi-annual interest payments; or

Ø the number of semi-annual interest payments that would have been payable on such converted notes from the last day through which interest was paid on the notes, or the issue date if no interest has been paid, to but excluding July 1, 2017.

The present values of the remaining interest payments will be computed using a discount rate equal to 2.0%.

If the conversion date falls after a record date and on or prior to the corresponding interest payment date, the amount of the coupon make-whole payment will be reduced by the amount of interest payable on such interest payment date to the holder of record of the converted notes at the close of business on the corresponding record date.

We may pay any coupon make-whole payments either in cash or in our common stock, at our election. If we elect to pay a coupon make-whole payment in our common stock, then the stock will be valued at 90% of the simple average of the daily volume weighted average prices of our common stock for the 10 trading days ending on and including the trading day immediately preceding the conversion date. The value of any shares issued in connection with a coupon make-whole payment may be less than the market price of our common stock on the date we issued the notes. The calculation of the simple average of the daily volume weighted average price is subject to appropriate adjustment as described under Conversion Rate Adjustments .

**CONVERSION RATE ADJUSTMENTS**

The conversion rate will be adjusted as described below. Notwithstanding the below, we will not make any adjustment to the conversion rate if holders may participate in the transaction as a result of holding the notes, without having to convert their notes on a basis equivalent to a holder of a number of shares of our common stock equal to the principal amount of the notes held divided by the applicable conversion price. This exception will not apply to any adjustment described under Adjustment to Conversion Rate Upon Conversion Upon Make-Whole Fundamental Changes. In addition, in no event will we adjust the conversion rate to the extent that the adjustment would reduce the conversion price below the par value per share of our common stock.

(1) If we issue shares of our common stock as a dividend or distribution on shares of our common stock, or if we effect a share split or share combination of our common stock, the conversion rate will be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_1}{OS_0}$$

where,  $OS_0$

$CR_0$  = the conversion rate in effect immediately prior to the open of business on the ex-date of such dividend or distribution, or immediately prior to the open of business on the effective date of such share split or share combination, as applicable;

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**Description of notes**

$CR_1$  = the conversion rate in effect immediately after the open of business on such ex-date or immediately after the open of business on such effective date;

$OS_0$  = the number of shares of our common stock outstanding immediately prior to the open of business on such ex-date or immediately prior to the open of business on such effective date; and

$OS_1$  = the number of shares of our common stock outstanding immediately after giving effect to such dividend, distribution, share split or share combination.

Any adjustment made under this clause (1) shall become effective (x) immediately after the open of business on the ex-date for such dividend or distribution, or (y) the date on which such share split or share combination becomes effective. If any dividend or distribution of the type described in this clause (1) is declared but not so paid or made, the conversion rate shall be immediately readjusted, effective as of the date our board of directors (or a committee thereof) determines not to pay such dividend or distribution to the conversion rate that would then be in effect if such dividend, distribution, share split or share combination had not been declared or announced.

(2) If we distribute to all or substantially all holders of our common stock any rights, options or warrants (other than pursuant to a stockholder rights plan adopted by the Company) entitling them for a period of not more than 60 calendar days to subscribe for or purchase shares of our common stock at a price per share less than the current market price (as defined below) of our common stock, the conversion rate will be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_0 + X}{OS_0 + Y}$$

where,

$CR_0$  = the conversion rate in effect immediately prior to the open of business on the ex-date for such issuance;

$CR_1$  = the conversion rate in effect immediately after the open of business on such ex-date;

$OS_0$  = the number of shares of our common stock outstanding immediately prior to the open of business on such ex-date;

X = the total number of shares of our common stock issuable pursuant to such rights, options or warrants; and

Y = the number of shares of our common stock equal to the aggregate price payable to exercise such rights, options or warrants divided by the current market price.

Any adjustment made pursuant to this clause (2) will be made successively whenever any such rights, options or warrants are distributed and shall become effective immediately after the open of business on the ex-date for such distribution. In the event that such rights, options or warrants described in this clause (2) are not so distributed, the conversion rate shall be readjusted to the conversion rate that would then be in effect if the ex-date for such distribution had not occurred. To the extent that such rights, options or warrants are not exercised prior to their expiration or shares of common stock are otherwise not delivered pursuant to such rights, options or warrants upon the exercise of such rights, options or warrants, the conversion rate shall be readjusted to the conversion rate that would then be in effect had the adjustments made upon the issuance of such rights, options or warrants been made on the basis of the delivery of only the number of shares of common stock actually delivered. For purposes of this clause (2), in determining the aggregate price payable for such shares of common stock, there shall be taken into



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account any consideration received for such rights, options or warrants and the value of such consideration if other than cash to be determined by our board of directors (or a committee thereof).

(3) If we distribute shares of our capital stock, evidences of our indebtedness, or other assets or property of ours or rights, options or warrants to acquire our capital stock or other securities to all or substantially all holders of our common stock, excluding:

∅ any dividends or distributions referred to in clause (1) above or clause (5) below;

∅ any rights, options or warrants referred to in clause (2) above;

∅ except as otherwise described below, rights issued pursuant to a stockholder rights plan adopted by the Company, or the detachment of such rights under the terms of any such plan;

∅ any dividends or distributions paid referred to in clause (4) below;

∅ any dividends and distributions in connection with a reclassification, change, consolidation, merger, conveyance, transfer, sale, lease or other disposition resulting in a change in the conversion consideration pursuant to the last paragraph in this Conversion Rate Adjustments subsection; and

∅ any spin-off to which the provisions set forth below in this clause (3) shall apply, then the conversion rate will be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{SP_0}{SP_0 - FMV}$$

where,

CR<sub>0</sub> = the conversion rate in effect immediately prior to the open of business on the ex-date for such distribution;

CR<sub>1</sub> = the conversion rate in effect immediately after the open of business on such ex-date;

SP<sub>0</sub> = the current market price; and

FMV = the fair market value (as determined by our board of directors (or a committee thereof)), on the ex-date for such distribution, of the shares of our capital stock, evidences of our indebtedness, or other assets or property of ours so distributed, expressed as an amount per share of our common stock.

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With respect to an adjustment pursuant to this clause (3) where there has been a payment of a dividend or other distribution on our common stock of shares of capital stock of any class or series of, or similar equity interest in, a subsidiary or other business unit of ours, which we refer to as a spin-off, that are, or when issued will be, quoted or listed on any securities exchange or other market, the conversion rate will instead be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{FMV_0 + MP_0}{MP_0}$$

where,

$CR_0$  = the conversion rate in effect immediately prior to the close of business on the last trading day of the valuation period (as defined below);

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$CR_1$  = the conversion rate in effect immediately after the close of business or the last trading day of the valuation period;

$FMV_0$  = the average of the last reported sale prices of the capital stock or similar equity interest distributed to holders of our common stock applicable to one share of our common stock over the ten consecutive trading-day period commencing on, and including, the ex-date of the spin-off (the valuation period); and

$MP_0$  = the average of the last reported sale prices of our common stock over the valuation period.

The adjustment to the conversion rate under the preceding paragraph will occur at the close of business on the last trading day of the valuation period, but will be given effect as of the open of business on the ex-date for the spin-off; provided that in respect of any conversion during the valuation period, references within this clause (3) to 10 trading days shall be deemed replaced with such lesser number of trading days as have elapsed between the ex-date of such spin-off and the conversion date in determining the applicable conversion rate.

(4) If we pay any cash dividend or distribution to all or substantially all holders of our common stock, the conversion rate will be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{SP_0 - C}{SP_0}$$

where,

$CR_0$  = the conversion rate in effect immediately prior to the open of business on the ex-date for such dividend or distribution;

$CR_1$  = the conversion rate in effect immediately after the open of business on the ex-date for such dividend or distribution;

$SP_0$  = the current market price; and

$C$  = the amount in cash per share we distribute to holders of our common stock.

(5) If we or any of our subsidiaries makes a payment in respect of a tender offer or exchange offer for our common stock subject to the tender offer rules, to the extent that the cash and value of any other consideration included in the payment per share of common stock exceeds the last reported sale price of our common stock on the trading day immediately succeeding the last date (the expiration date) on which tenders or exchanges may be made pursuant to such tender offer or exchange offer, the conversion rate will be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{FMV_0 + (SP_1 \times OS_1)}{OS_0 \times SP_1}$$

where,

$CR_0$  = the conversion rate in effect immediately prior to the close of business on the expiration date;

$CR_1$  = the conversion rate in effect immediately after the expiration date;



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FMV = the fair market value (as determined by our board of directors (or a committee thereof)), on the expiration date, of the aggregate value of all cash and any other consideration paid or payable for shares validly tendered or exchanged and not withdrawn as of the expiration date;

$OS_0$  = the number of shares of our common stock outstanding immediately prior to the last time tenders or exchanges may be made pursuant to such tender offer or exchange offer (the expiration time );

$OS_1$  = the number of shares of our common stock outstanding immediately after the expiration time (after giving effect to the purchase of all shares accepted for purchase exchange in such tender offer or exchange offer); and

$SP_1$  = the average of the last reported sale prices of our common stock over the ten consecutive trading-day period commencing on, and including, the trading day immediately following the expiration date.

Any adjustment made pursuant to this clause (5) shall become effective immediately prior to the opening of business on the trading day immediately following the expiration date; provided that in respect of any conversion within 10 trading days immediately following, and including, the expiration date of any tender or exchange offer, references with respect to 10 trading days shall be deemed replaced with such lesser number of trading days as have elapsed between the expiration date of such tender or exchange offer and the conversion date in determining the applicable conversion rate.

In the event that we are, or one of our subsidiaries is, obligated to purchase shares of our common stock pursuant to any such tender offer or exchange offer, but we are, or such subsidiary is, permanently prevented by applicable law from effecting any such purchases, or all such purchases are rescinded, then the conversion rate shall be adjusted to be the conversion rate which would then be in effect if such tender offer or exchange offer had not been made. Except as set forth in the preceding sentence, if the application of the formula in this clause (5) to any tender offer or exchange offer would result in a decrease in the conversion rate, no adjustment shall be made for such tender offer or exchange offer under this clause (5).

If:

Ø any distribution or transaction described in clauses (1) to (5) above has not yet resulted in an adjustment to the applicable conversion rate on the trading day in question, and

Ø the shares the holder will receive on settlement are not entitled to participate in the relevant distribution or transaction (because they were not held on a related record date or otherwise),

then promptly after such distribution or transaction has occurred, we will adjust the number of shares that we deliver to the holder as we determine is appropriate to reflect the relevant distribution or transaction. In addition, if a conversion rate adjustment becomes effective on any ex-date as described above, and a holder that has converted its notes would become the record holder of shares of our common stock as of the related conversion date as described under Conversion Procedures above based on an adjusted conversion rate for such ex-date, then, notwithstanding the conversion rate adjustment provisions above, the conversion rate adjustment relating to such ex-date will not be made for such converting holder. Instead, such holder will be deemed to be the record owner of shares of an un-adjusted basis and participate in the related dividend, distribution or other event giving rise to such adjustment or, if no holders of our common stock affirmatively make such election, the types and amounts of consideration actually received by such holders.

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For purposes of clauses (2), (3) and (4) above, **current market price** means the average of the last reported sale prices of our common stock over the 10 consecutive trading-day period ending on the trading day immediately preceding the ex-date of the distribution requiring such computation.

We do not currently have a stockholder rights plan. To the extent that we have a stockholder rights plan in effect upon conversion of the notes into our common stock, you will receive, in addition to our common stock, the rights under the stockholder rights plan, unless prior to any conversion, the rights have separated from our common stock, in which case the conversion rate will be adjusted at the time of separation as if we distributed to all holders of our common stock, shares of our capital stock, evidences of indebtedness or assets as described in clause (3) above, subject to readjustment in the event of the expiration, termination or redemption of such rights. Any distribution of rights or warrants pursuant to a rights plan that would allow you to receive upon conversion, in addition to any shares of common stock, the right or warrants described therein with respect to such common stock (unless such rights or warrants have separated from the common stock) shall not constitute a distribution of rights or warrants that would entitle you to an adjustment of the conversion rate.

For purposes of clauses (3) and (4), except with respect to a spin-off, in cases where the fair market value of assets, debt securities or certain rights, warrants or options to purchase our securities, or the amount of the cash dividend or distribution applicable to one share of our common stock, distributed to all or substantially all stockholders:

Ø equals or exceeds the average of the last reported sale prices of our common stock over the relevant consecutive trading-day period ending on the trading day immediately preceding the ex-date for such distribution; or

Ø such average last reported sale price exceeds the fair market value of such assets, debt securities or rights, warrants or options or the amount of cash so distributed by less than \$1.00,

rather than being entitled to an adjustment in the conversion rate, the holder of a note will be entitled to receive upon conversion, in addition to the consideration that a holder is entitled to receive upon conversion, the kind and amount of assets, debt securities or rights, warrants or options comprising the distribution, if any, that such holder would have received if such holder had held a number of shares of our common stock equal to the principal amount of the notes held divided by the conversion price in effect immediately prior to the ex-date for determining the stockholders entitled to receive the distribution; provided that if our board of directors determines **FMV** for purposes of any such adjustment by reference to the actual or when issued trading market for any securities, it must in doing so consider the prices in such market over the same period used in computing current market price.

Except as stated herein, we will not adjust the conversion rate for the issuance of shares of our common stock. In addition, the applicable conversion rate will not be adjusted:

Ø upon the issuance of any shares of our common stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on our securities and the investment of additional optional amounts in shares of our common stock under any plan;

Ø upon the issuance of any shares of our common stock or options or rights to purchase those shares pursuant to any present or future employee, director or consultant benefit plan or program of or assumed by us or any of our subsidiaries;

Ø upon the issuance of any shares of our common stock pursuant to any option, warrant, right or exercisable, exchangeable or convertible security not described in the preceding bullet and outstanding as of the date the notes were first issued;



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Ø for a change in the par value of our common stock; or

Ø for accrued and unpaid interest, if any.

As used in this section, *ex-date* means the first date on which shares of our common stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive the issuance or distribution in question, and *effective date* means the first date on which the shares trade on the applicable exchange or in the applicable market, regular way, reflecting the transaction.

We are permitted to the extent permitted by law and the rules of the NASDAQ Global Market or any other securities exchange on which our common stock is then listed to increase the conversion rate of the notes by any amount for a period of at least 20 business days if our board of directors (or a committee thereof) determines that such increase would be in our best interest. We may also (but are not required to) increase the conversion rate to avoid or diminish income tax to holders of our common stock or rights to purchase shares of our common stock in connection with a dividend or distribution of shares (or rights to acquire shares) or similar event.

A holder may, in some circumstances, including a distribution of cash dividends to holders of our shares of common stock, be deemed to have received a distribution subject to U.S. federal income tax as a result of an adjustment or the nonoccurrence of an adjustment to the conversion rate. For a discussion of the U.S. federal income tax treatment of an adjustment to the conversion rate, see *Material United States federal income tax considerations*.

Adjustments to the applicable conversion rate will be calculated to the nearest 1/10,000th of a share. We will not be required to make an adjustment in the conversion rate unless the adjustment would require a change of at least 1% in the conversion rate. However, we will carry forward any adjustments that are less than 1% of the conversion rate and make such carried-forward adjustments on each conversion date for any notes.

In the event of:

Ø any reclassification of our common stock;

Ø any fundamental change described in clause (2) of the definition thereof;

Ø a share exchange, consolidation, or merger involving us; or

Ø a conveyance, transfer, sale, lease or other disposition to another person of all or substantially all of our assets, in which holders of our common stock received cash, securities or other property (the *reference property*) in exchange for their shares of common stock, the notes will become convertible based on the type and amount of consideration that the holders of a number of shares of our common stock equal to the principal amount of the notes divided by the conversion price would have received in such reclassification, share exchange, consolidation, merger, conveyance, transfer, sale, lease or other disposition. For purposes of the foregoing, the type and amount of consideration that a holder of our common stock received in the case of reclassifications, share exchanges, consolidations, mergers, conveyances, transfers, sales, leases or other dispositions that cause our common stock to be exchanged for more than a single type of consideration (determined based in part upon any form of stockholder election) will be deemed to be the weighted average of the types and amounts of consideration received by the holders of our common stock that affirmatively made such an election.

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**Table of Contents****Description of notes****ADJUSTMENT TO CONVERSION RATE UPON CONVERSION UPON MAKE-WHOLE FUNDAMENTAL CHANGES**

If you elect to convert your notes in the event of a make-whole fundamental change prior to July 1, 2017, the conversion rate will be increased by an additional number of shares of our common stock (the "additional shares") as described below.

A "make-whole fundamental change" means any transaction or event that constitutes a fundamental change pursuant to the first, second (disregarding the proviso in such bullet), third, fourth and fifth bullets under the definition of fundamental change as described under "Repurchase at the Option of the Holder Upon a Fundamental Change" below pursuant to which 10% or more of the consideration for our common stock (other than cash payments for preferred shares and cash payments made in respect of dissenters' appraisal rights) in such fundamental change transaction consists of cash or securities (or other property) that are not shares of common stock, depositary receipts or other certificates representing common equity interests traded or scheduled to be traded immediately following such transaction on a U.S. national securities exchange.

The number of additional shares by which the conversion rate will be increased will be determined by reference to the table below, based on the date on which the make-whole fundamental change occurs or becomes effective (the "make-whole reference date") and the price (the "stock price") paid per share of our common stock in the make-whole fundamental change. If holders of our common stock receive only cash in the make-whole fundamental change, the stock price shall be the cash amount paid per share. Otherwise, the stock price shall be the average of the last reported sale prices of our common stock over the five consecutive trading day period ending on the trading day preceding the date on which the make-whole fundamental change occurs or becomes effective (the "effective date").

The stock prices set forth in the first row of the table below (i.e., column headers) will be adjusted as of any date on which the conversion rate of the notes is otherwise adjusted. The adjusted stock prices will equal the stock prices applicable immediately prior to such adjustment, multiplied by a fraction, the numerator of which is the conversion rate immediately prior to the adjustment giving rise to the stock price adjustment and the denominator of which is the conversion rate as so adjusted. The number of additional shares will be adjusted in the same manner as the conversion rate as set forth under "Conversion Rate Adjustments."

The following table sets forth the number of additional shares by which the conversion rate shall be increased based on the stock price and make-whole reference date for the make-whole fundamental change:

Make-Whole Reference Date	Stock Price														
	\$4.95	\$5.50	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00	\$11.00	\$12.00	\$13.00	\$14.00	\$15.00	\$16.00	\$18.00	\$20.00
July 5, 2012	26.3505	26.3505	26.2426	18.9389	14.1113	10.7466	8.3001	6.4612	5.0435	3.9297	3.0430	2.3314	1.7576	0.9210	0.3793
July 1, 2013	26.3505	26.3505	23.1694	16.0302	11.5563	8.5935	6.5306	5.0302	3.8989	3.0216	2.3276	1.7715	1.3225	0.6641	0.2334
July 1, 2014	26.3505	24.9234	19.3539	12.0583	7.8906	5.4405	3.9337	2.9487	2.2594	1.7459	1.3443	1.0202	0.7536	0.3475	0.0680
July 1, 2015	26.3505	22.1860	15.8854	7.1088	1.7703	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
July 1, 2016	26.3505	19.0215	12.8142	5.2141	1.1997	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
July 1, 2017	26.3505	6.1485	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000



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The exact stock prices and make-whole reference dates may not be set forth in the table above, in which case if the stock price is between two stock price amounts in the table or the effective date is between make-whole reference dates in the table, the number of additional shares will be determined by a straight-line interpolation between the number of additional shares set forth for the higher and lower stock price amounts and the two make-whole reference dates, as applicable, based on a 365-day year. If the stock price is:

Ø greater than \$20.00 per share (subject to adjustment in the same manner as the stock prices set forth in the column headings of the table above), the conversion rate will not be increased; or

Ø less than \$4.95 per share (subject to adjustment in the same manner as the stock prices set forth in the column headings of the table above), the conversion rate will not be increased.

Notwithstanding the foregoing, in no event will the total number of shares of our common stock issuable upon conversion exceed 202.0202 per \$1,000 principal amount of notes, subject to adjustments in the same manner as the conversion rate as set forth under Conversion Rate Adjustments.

Any conversion that entitles the converting holder to an increase in the conversion rate as described in this section shall be settled as described under Conversion Procedures above.

Our obligation to increase the conversion rate as described above could be considered a penalty, in which case the enforceability thereof would be subject to general principles of the reasonableness of economic remedies.

An increase in the conversion rate for notes as a result of a fundamental change may also be treated as a distribution subject to U.S. federal income tax as a dividend. See Material United States federal income tax considerations.

### **REPURCHASE AT THE OPTION OF THE HOLDER UPON A FUNDAMENTAL CHANGE**

If a fundamental change (as defined below in this section) occurs at any time, you will have the right, at your option, to require us to repurchase any or all of your notes, or any portion of the principal amount thereof that is equal to \$1,000 or a multiple of \$1,000, on a date (the fundamental change repurchase date ) of our choosing that is not less than 20 or more than 35 business days after the date of our notice of the fundamental change. The price we are required to pay is equal to 100% of the principal amount of the notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date (unless the fundamental change repurchase date is between a regular record date and the interest payment date to which it relates, in which case we will pay the full interest amount payable on such interest payment date to the record holder as of such record date). Any notes repurchased by us will be paid for in cash.

A fundamental change will be deemed to have occurred at the time after the notes are originally issued that any of the following occurs:

Ø if any person or group within the meaning of Section 13(d) of the Exchange Act other than us, our subsidiaries or our or their employee benefit plans becomes the direct or indirect beneficial owner, as defined in Rule 13d-3 under the Exchange Act, of our common equity representing more than 50% of the voting power of our common equity;



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Ø consummation of (A) any recapitalization, reclassification or change of our common stock (other than changes resulting from a subdivision or combination) as a result of which our common stock would be converted into, or exchanged for, stock, other securities, other property or assets or (B) any share exchange, consolidation or merger of us pursuant to which our common stock will be converted into cash, securities or other property or any conveyance, transfer, sale, lease or other disposition in one transaction or a series of transactions of all or substantially all of the consolidated assets of us and our subsidiaries, taken as a whole, to any person other than one of our subsidiaries; provided, however, that a transaction pursuant to which the holders of 50% or more of the total voting power of all classes of our common equity immediately prior to such transaction have the right to exercise 50% or more of the total voting power of all shares of common equity of the continuing or surviving corporation (or any parent thereof) entitled to vote generally in elections of directors of such corporation (or any parent thereof) immediately after such event shall not be a fundamental change;

Ø the following persons cease for any reason to constitute a majority of our board of directors:

Ø individuals who on the first issue date of the notes constituted our board of directors; and

Ø any new directors whose election to our board of directors or whose nomination for election by our stockholders was approved by at least a majority of our directors then still in office either who were directors on such first issue date of the notes or whose election or nomination for election was previously so approved;

Ø our stockholders approve any plan or proposal for our liquidation or dissolution; or

Ø our common stock (or other common stock into which the notes are then convertible) ceases to be listed on any of the NASDAQ Global Market, the NASDAQ Global Select Market, the NASDAQ Capital Market or the New York Stock Exchange or other national securities exchange.

A fundamental change as a result of the first and second bullets above will not be deemed to have occurred, however, if at least 90% of the consideration paid for our common stock, excluding cash payments for fractional shares and cash payments made pursuant to dissenters appraisal rights, in the transaction or transactions constituting the fundamental change consists of shares of common stock listed on any of the NASDAQ Global Market, NASDAQ Global Select Market, the NASDAQ Capital Market or the New York Stock Exchange (or any of their respective successors) or that will be so listed immediately following such fundamental change (these securities being referred to as publicly traded securities ) and as a result of this transaction or transactions the notes become convertible into such publicly traded securities on the basis set forth under the last paragraph under Conversion Rate Adjustments, subject to the provisions set forth under Conversion Procedures above.

On or before the 15th calendar day after the occurrence of a fundamental change, we will provide to all holders of the notes and the trustee and paying agent a written notice of the occurrence of the fundamental change and of the resulting repurchase right. Such notice shall state, among other things:

Ø the events causing a fundamental change;

Ø the date of the fundamental change;

- Ø the last date on which a holder may exercise the repurchase right;
  
- Ø the fundamental change repurchase price;
  
- Ø the fundamental change repurchase date;
  
- Ø the name and address of the paying agent and the conversion agent;

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- Ø that the notes are eligible to be converted, the applicable conversion rate and any adjustments to the applicable conversion rate;
- Ø that the notes with respect to which a fundamental change repurchase notice has been delivered by a holder may be converted only if the holder withdraws the fundamental change repurchase notice in accordance with the terms of the indenture;
- Ø that a holder must exercise its repurchase right by the close of business on the business day immediately preceding the fundamental change repurchase date;
- Ø that a holder has the right to withdraw any notes tendered for repurchase prior to the close of business on the business day immediately preceding the fundamental change repurchase date; and

- Ø the procedures that holders must follow to require us to repurchase their notes.

To exercise the repurchase right, you must deliver, by the close of business on the business day immediately preceding the fundamental change repurchase date, subject to extension to comply with applicable law, the notes to be repurchased, duly endorsed for transfer, together with a written repurchase notice and the form entitled "Form of Fundamental Change Repurchase Notice" on the reverse side of the notes duly completed, to the paying agent. Your repurchase notice must state:

- Ø if certificated notes have been issued, the certificate numbers of your notes to be delivered for repurchase, or if certificated notes have not been issued, your notice must comply with appropriate DTC procedures;

- Ø the portion of the principal amount of notes to be repurchased, which must be \$1,000 or an integral multiple thereof; and

- Ø that the notes are to be repurchased by us pursuant to the applicable provisions of the notes and the indenture.

You may withdraw any repurchase notice (in whole or in part) by a written notice of withdrawal delivered to the paying agent prior to the close of business on the business day prior to the fundamental change repurchase date. The notice of withdrawal shall state:

- Ø if certificated notes have been issued, the certificate numbers of the withdrawn notes, or if certificated notes have not been issued, your notice must comply with appropriate DTC procedures;

- Ø the principal amount of the withdrawn notes; and

- Ø the principal amount, if any, which remains subject to the repurchase notice.

We will be required to repurchase the notes on the fundamental change repurchase date, subject to extension to comply with applicable law. You will receive payment of the fundamental change repurchase price promptly following the later of the fundamental change repurchase date or the time of book-entry transfer or the delivery of the notes. If the paying agent holds money sufficient to pay the fundamental change repurchase

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price of the notes on the fundamental change repurchase date, then:

- Ø the notes will cease to be outstanding and interest will cease to accrue (whether or not book-entry transfer of the notes is made or whether or not the note is delivered or transferred to the paying agent); and
- Ø all other rights of the holder will terminate (other than the right to receive the fundamental change repurchase price and previously accrued and unpaid interest upon delivery or transfer of the notes).

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The repurchase rights of the holders could discourage a potential acquirer of us. The fundamental change repurchase feature, however, is not the result of management's knowledge of any specific effort to obtain control of us by any means or part of a plan by management to adopt a series of anti-takeover provisions.

The term fundamental change is limited to specified transactions and may not include other events that might adversely affect our financial condition. In addition, the requirement that we offer to repurchase the notes upon a fundamental change may not protect holders in the event of a highly leveraged transaction, reorganization, merger or similar transaction involving us.

No notes may be purchased at the option of holders upon a fundamental change if there has occurred and is continuing an event of default other than an event of default that is cured by the payment of the fundamental change repurchase price of the notes.

The definition of fundamental change includes a phrase relating to the conveyance, transfer, sale, lease or other disposition of all or substantially all of our consolidated assets. There is no precise, established definition of the phrase substantially all under New York law, which governs the indenture and the notes, or under the laws of Delaware, our state of incorporation. Accordingly, the ability of a holder of the notes to require us to repurchase its notes as a result of the conveyance, transfer, sale, lease or other disposition of less than all of our assets may be uncertain.

If a fundamental change were to occur, we may not have enough funds to pay the fundamental change repurchase price. See Risk factors Certain Risks Relating to the Notes and Our Common Stock We may not have the ability to pay interest on the notes or to repurchase or redeem the notes in this prospectus supplement. If we fail to repurchase the notes when required following a fundamental change, we will be in default under the indenture. In addition, we have, and may in the future incur, other indebtedness with similar change in control provisions permitting our holders to accelerate or to require us to repurchase our indebtedness upon the occurrence of similar events or on some specific dates.

### **CONSOLIDATION, MERGER AND SALE OF ASSETS**

The indenture provides that we may not consolidate with or merge with or into, or sell, convey, transfer or lease all or substantially all of our properties and assets to, another person, unless:

- Ø either (A) we are the surviving corporation or (B) the resulting, surviving or transferee person (if other than us) is a corporation organized and existing under the laws of the United States of America, any State thereof or the District of Columbia, and such person expressly assumes by supplemental indenture all of our obligations under the notes and the indenture;
- Ø immediately after giving effect to such transaction, no default or event of default has occurred and is continuing under the indenture; and
- Ø we or the successor person have delivered to the trustee an Officer's Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and such supplemental indenture (if applicable) complies with this provision and that all conditions precedent provided for in the indenture relating to such transaction have been complied with.

In the event of any transaction described, and complying with the conditions listed, in the immediately preceding paragraph in which we are not the surviving corporation, the successor corporation formed or remaining shall be substituted for us and shall succeed to, and may exercise, every right and power of ours, and we shall be discharged from our obligations under the notes and the indenture.



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Although these types of transactions are permitted under the indenture, certain of the foregoing transactions could constitute a fundamental change (as defined above), permitting each holder to require us to repurchase the notes of such holder as described above.

An assumption by any person of our obligations under the notes and the indenture might be deemed for U.S. federal income tax purposes to be an exchange of the notes for new notes by the holders thereof, resulting in recognition of gain or loss for such purposes and possibly other adverse tax consequences to the holders. Holders should consult their own tax advisors regarding the tax consequences of such an assumption.

### **REPURCHASE OF NOTES BY THE COMPANY AT THE OPTION OF THE HOLDER**

On July 1, 2017, a holder may require us to purchase all or a portion of the holder's outstanding notes at a price in cash equal to 100% of the principal amount of the notes to be purchased, plus any accrued and unpaid interest to, but excluding, the purchase date. However, if the purchase date falls after a record date for the payment of interest but on or prior to the immediately succeeding interest payment date, we will, on the purchase date, pay the accrued and unpaid interest to, but excluding, the purchase date to the holder of record at the close of business on the immediately preceding record date. Accordingly, the holder submitting the note for purchase will not receive this accrued and unpaid interest unless that holder was also the holder of record at the close of business on the immediately preceding record date.

On the purchase date, we will purchase all notes for which the holder has delivered and not withdrawn a written purchase notice. Holders may submit their written purchase notice to the paying agent at any time from the open of business on the date that is 20 business days before the purchase date until the close of business on the business day immediately preceding the purchase date.

For a discussion of certain tax consequences to a holder receiving cash upon a purchase of the notes at the holder's option, see "Material United States federal income tax considerations."

We will give notice on a date that is at least 20 business days before each purchase date to all holders at their addresses shown on the register of the registrar, and to beneficial owners as required by applicable law, stating, among other things:

- Ø the amount of the purchase price;
- Ø that notes with respect to which the holder has delivered a purchase notice may be converted only if the holder withdraws the purchase notice in accordance with the terms of the indenture; and
- Ø the procedures that holders must follow to require us to purchase their notes, including the name and address of the paying agent. To require us to purchase its notes, the holder must deliver a purchase notice that states:
  - Ø the certificate numbers of the holder's notes to be delivered for purchase, if they are in certificated form;
  - Ø the principal amount of the notes to be purchased, which must be an integral multiple of \$1,000; and
  - Ø that the notes are to be purchased by us pursuant to the applicable provisions of the indenture.

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A holder that has delivered a purchase notice may withdraw the purchase notice by delivering a written notice of withdrawal to the paying agent before the close of business on the business day before the purchase date. The notice of withdrawal must state:

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**Description of notes**

Ø the name of the holder;

Ø a statement that the holder is withdrawing its election to require us to purchase its notes;

Ø the certificate numbers of the notes being withdrawn, if they are in certificated form;

Ø the principal amount being withdrawn, which must be an integral multiple of \$1,000; and

Ø the principal amount, if any, of the notes that remain subject to the purchase notice, which must be an integral multiple of \$1,000. If the notes are not in certificated form, the above notices must comply with appropriate DTC procedures.

To receive payment of the purchase price for a note for which the holder has delivered and not withdrawn a purchase notice, the holder must deliver the note, together with necessary endorsements, to the paying agent at any time after delivery of the purchase notice. We will pay the purchase price for the note on the later of the purchase date and the time of delivery of the note, together with necessary endorsements.

If the paying agent holds on a purchase date money sufficient to pay the purchase price due on a note in accordance with the terms of the indenture, then, on and after that purchase date, the note will cease to be outstanding and interest on the note will cease to accrue, whether or not the holder delivers the note to the paying agent. Thereafter, all other rights of the holder terminate, other than the right to receive the purchase price upon delivery of the note.

We may not have the financial resources, and we may not be able to arrange for financing, to pay the purchase price for all notes holders have elected to have us purchase.

In connection with any purchase offer, we will, to the extent applicable:

Ø comply with the provisions of Rule 13e-4 and Regulation 14E and all other applicable laws; and

Ø file a Schedule TO or any other required schedule under the Exchange Act or other applicable laws.

**REDEMPTION OF NOTES AT THE COMPANY'S OPTION**

**Provisional Redemption by the Company**

At any time and from time to time beginning July 1, 2015 but prior to July 1, 2017, we may redeem at our option, in whole or in part, any or all of the notes in cash at the redemption price, provided that the last reported sale price of our common stock for 20 or more trading days in a period of 30 consecutive trading days ending on the trading day immediately prior to the date of the redemption notice exceeds 150% of the applicable conversion price in effect on each such trading day. The redemption price will equal the sum of 100% of the principal amount of the notes being redeemed, plus any accrued and unpaid interest to, but excluding, the redemption date. Any notes redeemed by us will be paid for in cash.



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### **Description of notes**

The last reported sale price of our common stock on any date means:

- ∅ the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported by the NASDAQ Global Market; or
- ∅ if our common stock is not listed for trading on the NASDAQ Global Market, the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which our common stock is traded; or
- ∅ if our common stock is not listed for trading on a U.S. national or regional securities exchange, the closing price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) for our common stock on that date as reported by the OTC Bulletin Board; or
- ∅ if not so reported by the OTC Bulletin Board, the last quoted bid price for our common stock in the over-the-counter market on that date as reported by OTC Markets Group, Inc. or a similar organization; or
- ∅ if our common stock is not so quoted by OTC Markets Group, Inc. or a similar organization, the average of the mid-point of the last bid and ask prices for our common stock on the relevant date from a nationally recognized independent investment banking firm selected by us for this purpose.

Trading day means a day during which:

- ∅ the NASDAQ Global Market is open for trading, or if our common stock is not listed for trading on the NASDAQ Global Market, the principal U.S. national or regional securities exchange on which our common stock is listed is open for trading, or if our common stock is not so quoted or listed, any business day; and

- ∅ there is no market disruption event.

If our common stock is listed for trading on the NASDAQ Global Market or listed on another U.S. national or regional securities exchange, market disruption event means (i) a failure by the primary U.S. national or regional securities exchange or market on which our common stock is listed or admitted to trading to open for trading during its regular trading session or (ii) the occurrence or existence during the one-half hour period ending on the scheduled close of trading on any trading day of any material suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the stock exchange or otherwise) in our common stock or in any options, contracts or future contracts relating to our common stock.

### **Optional Redemption by the Company**

Except as set forth under Provisional Redemption by the Company above, we cannot redeem the notes prior to July 1, 2017. We may redeem the notes at our option, in whole or in part, at any time, and from time to time, on or after July 1, 2017, at a redemption price, payable in cash, equal to 100% of the principal amount of the notes we redeem, plus any accrued and unpaid interest to, but excluding, the redemption date. The

redemption date must be a business day.

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#### **PAYMENT AND SELECTION OF NOTES TO REDEEM**

If we set a redemption date between a regular record date and the corresponding interest payment date, we will not pay accrued interest to any redeeming holder, and will instead pay the full amount of the relevant interest payment on such interest payment date to the holder of record on such a regular record date.

If the paying agent holds money sufficient to pay the redemption price due on a note on the redemption date in accordance with the terms of the indenture, then on and after the redemption date, the note will cease to be outstanding and interest on the note will cease to accrue, whether or not the holder delivers the note to the paying agent. Thereafter, all other rights of the holder terminate, other than the right to receive the redemption price upon delivery of the note.

We will give written notice of redemption not more than 60 calendar days but not less than 30 calendar days prior to the redemption date to all record holders at their addresses set forth in the register of the registrar. This notice will state, among other things:

Ø that you have a right to convert the notes called for redemption, and the conversion rate then in effect; and

Ø the date on which your right to convert the notes called for redemption will expire.

If we redeem less than all of the outstanding notes, the trustee will select the notes to be redeemed in integral multiples of \$1,000 principal amount, on a pro rata basis or in accordance with any other method the trustee considers fair and appropriate in accordance with DTC procedures. However, we may redeem the notes only in integral multiples of \$1,000 principal amount. If a portion of a holder's notes is selected for partial redemption and the holder converts a portion of the notes, the principal amount of the note that is subject to redemption will be reduced by the principal amount that the holder converted.

In the event of any redemption in part, we shall not be required to (i) issue, register the transfer of or exchange any notes during a period beginning at the opening of business 15 calendar days before any selection for redemption of notes and ending at the close of business on the earliest date on which the relevant notice of redemption is deemed to have been given to all holders of notes to be redeemed or (ii) register the transfer of or exchange any notes so selected for redemption, in whole or in part, except the unredeemed portion of any notes being redeemed in part.

We will not redeem any notes at our option if the principal amount of the notes has been accelerated and the acceleration has not been rescinded on or before the redemption date.

For a discussion of certain tax consequences to a holder upon a redemption of notes, see Material United States federal income tax considerations.

#### **EVENTS OF DEFAULT; NOTICE AND WAIVER**

Each of the following is an event of default with respect to the notes:

Ø default by us in any payment of interest on any note when due and payable and the default continues for a period of 30 days;



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- Ø default by us in the payment of principal of any note when due and payable at its stated maturity, upon required repurchase, upon redemption, upon acceleration or otherwise;
  
- Ø failure by us to satisfy our conversion obligation upon exercise of a holder's conversion right and such failure continues for 5 days;
  
- Ø failure by us to comply with our obligations under Consolidation, Merger and Sale of Assets ;
  
- Ø failure by us to comply with our notice obligations under Repurchase at the Option of the Holder Upon a Fundamental Change ;
  
- Ø failure by us for 50 days after written notice from the trustee, at the direction of the holders, or the holders of at least 25% principal amount of the notes then outstanding has been received by us to comply with any of our other agreements contained in the notes or indenture relating to the notes;
  
- Ø default under any agreements, indentures or instruments under which we or any of our significant subsidiaries, as defined in Article 1, Rule 1-02 of Regulation S-X, then has outstanding, or by which there may be secured or evidenced, any indebtedness for money borrowed having a principal amount in excess of \$5,000,000 in the aggregate of the Company and/or any such subsidiary, whether such indebtedness now exists or shall hereafter be created, and such default results in such indebtedness being accelerated or otherwise becoming due and owing prior to its scheduled maturity or such default constitutes a failure to pay at least \$5,000,000 of such indebtedness when due and payable (after the expiration of any applicable grace period) at its stated maturity, upon required repurchase, upon declaration or otherwise; provided, that any such event of default shall be deemed cured and not continuing upon payment of such indebtedness or rescission of such declaration;
  
- Ø one or more judgments, orders or decrees for the payment of money in excess of \$5,000,000, either individually or in the aggregate, shall be entered against us or any of our significant subsidiaries and shall not be discharged, bonded, paid, stayed, waived, subject to a negotiated settlement or subject to insurance within 60 days after (A) the date on which the right to appeal thereof has expired if no such appeal has commenced or (B) the date on which all rights to appeal have been extinguished; or
  
- Ø certain events of bankruptcy, insolvency or reorganization of the Company or any of our significant subsidiaries.  
 The indenture provides that if an event of default occurs and is continuing, the trustee by notice to us, at the direction of the holders of the notes, or the holders of at least 25% in aggregate principal amount of the outstanding notes by notice to us and the trustee may, and the trustee at the request of such holders shall, declare 100% of the principal of and accrued and unpaid interest, if any, on all notes to be due and payable. In case of certain events of bankruptcy, insolvency or reorganization involving us, 100% of the principal of and accrued and unpaid interest, if any, on the notes automatically will become due and payable. Upon such a declaration, such principal and accrued and unpaid interest will be due and payable immediately.

Notwithstanding the foregoing, the indenture will provide that, to the extent elected by us, the sole remedy for an event of default relating to the failure to comply with the reporting obligations in the indenture, which are described below under Reports, will, for the 365 days after the occurrence of such an event of default, consist exclusively of the right to receive additional interest on the notes at an annual rate equal to 0.50% of the principal amount of the notes. This additional interest will be payable in the same manner and on the same dates as the stated interest payable on the notes. The additional interest will accrue on all outstanding notes from, and including, the date on which an event of default relating to a failure to comply with the reporting obligations in the indenture first occurs to, but not including, the 365th day thereafter (or such

earlier date on which the event of default relating to the

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**Description of notes**

reporting obligations shall have been cured or waived). On such 365th day (if such violation is not cured or waived prior to such 365th day), such additional interest will cease to accrue and the notes will be subject to acceleration as provided above. If we do not elect to pay additional interest during the continuance of such an event of default, as applicable, in accordance with this paragraph, the notes will be subject to acceleration as provided above.

In order to elect to pay additional interest on the notes as the sole remedy during the first 365 days after the occurrence of an event of default relating to the failure to comply with the reporting obligations in the indenture or the failure to comply with Section 314(a) of the Trust Indenture Act in accordance with the immediately preceding paragraph, we must notify all record holders of notes and the trustee and paying agent of such election on or before the close of business on the date on which such event of default first occurs. If we fail to timely give such notice, the notes will be immediately subject to acceleration as provided above.

The holders of a majority in aggregate principal amount of the notes outstanding, by written notice to us and the trustee, may (i) waive all past defaults (except with respect to nonpayment of principal or interest, including any additional interest, failure to deliver consideration due upon conversion, failure to repurchase any notes when required and failure to pay the redemption price on the date of redemption in connection with our exercising our redemption rights) and (ii) rescind and annul such declaration and its consequences if:

∅ rescission would not conflict with any judgment or decree of a court of competent jurisdiction; and

∅ such declaration is not the result of a failure to deliver consideration due upon conversion, a payment default arising from our failure to repurchase any notes when required or a payment default arising from our failure to pay the redemption price on the date of redemption in connection with our exercising our redemption rights.

If any portion of the amount payable on the notes upon acceleration is considered by a court to be unearned interest (through the allocation of the value of the instrument to the embedded warrant or otherwise), the court could disallow recovery of any such portion.

Subject to the provisions of the indenture relating to the duties of the trustee, if an event of default occurs and is continuing, the trustee will be under no obligation to exercise any of the rights or powers under the indenture at the request or direction of any of the holders unless such holders have offered to the trustee indemnity or security reasonably satisfactory to it against any loss, liability or expense. Except to enforce the right to receive payment of principal or interest, including additional interest, if any, when due, no holder may pursue any remedy with respect to the indenture or the notes unless:

∅ such holder has previously given the trustee written notice that an event of default is continuing;

∅ holders of at least 25% in principal amount of the outstanding notes have requested the trustee to pursue the remedy;

∅ such holders have offered the trustee security or indemnity satisfactory to it against any loss, liability or expense;

∅ the trustee has not complied with such request within 60 days after the receipt of the request and the offer of security or indemnity; and

Ø the holders of a majority in principal amount of the outstanding notes have not given the trustee a direction that in the opinion of the trustee, is inconsistent with such request within such 60-day period.

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Subject to certain restrictions, the holders of a majority in principal amount of the outstanding notes are given the right to direct the time, method and place of conducting any proceeding for a remedy available to the trustee or of exercising any trust or power conferred on the trustee. The indenture will provide that if an event of default has occurred and is continuing, the trustee will be required in the exercise of its powers to use the degree of care that a prudent person would use in the conduct of its own affairs. The trustee, however, may refuse to follow any direction that conflicts with law or the indenture or that the trustee determines is unduly prejudicial to the rights of any other holder or that would involve the trustee in personal liability. Prior to taking any action under the indenture, the trustee will be entitled to indemnification satisfactory to it in its sole discretion against all losses and expenses caused by taking or not taking such action.

The indenture will provide that if a default occurs and is continuing and is actually known to the trustee, the trustee must send to each holder notice of the default within 90 days after it occurs or, if later, promptly after the trustee obtains knowledge thereof. Except in the case of a default in the payment of principal of or interest on any note, the trustee may withhold notice if and so long as the trustee in good faith determines that withholding notice is in the interests of the holders. In addition, we will be required to deliver to the trustee, within 120 days after the end of each fiscal year, a certificate indicating whether the signers thereof know of any default that occurred during the previous year. We also will be required to deliver to the trustee, within 30 days after the occurrence thereof, written notice of any events which would constitute certain defaults, their status and what action we are taking or propose to take in respect thereof.

### **MODIFICATION AND AMENDMENT**

#### **Changes Requiring Majority Approval**

Subject to certain exceptions described below under Changes Requiring Approval of Each Affected Holder, the indenture (including the terms and conditions of the notes) may be amended with the written consent or affirmative vote of the holders of at least a majority in aggregate principal amount of the notes then outstanding (including without limitation, consents obtained in connection with a purchase of, or tender offer or exchange offer for, notes), without prior notice to any other holder.

#### **CHANGES REQUIRING APPROVAL OF EACH AFFECTED HOLDER**

Without the consent of each holder of an outstanding note affected, we may not amend the indenture to:

- Ø make any change in the percentage of principal amount of notes whose holders must consent to an amendment, supplement or waiver or to make any change in this provision for modification;
- Ø reduce any rate of interest or extend the time for payment of interest on the notes;
- Ø reduce the principal amount of, or the repurchase price or redemption price with respect to, the notes, or change their final stated maturity;
- Ø make payments on the notes payable in currency other than as originally stated in the notes;
- Ø impair the holder's right to institute suit for the enforcement of any payment on the notes;

- Ø adversely affect the ranking of the notes as our senior unsecured indebtedness;
- Ø waive a continuing default or event of default regarding any payment on the notes;
- Ø adversely affect the repurchase provisions of the notes; or

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**Description of notes**

∅ adversely affect the conversion provisions of the notes.

**CHANGES REQUIRING NO APPROVAL**

We may amend or supplement the indenture or waive any provision of it without the consent of any holders of notes in some circumstances, including:

- ∅ to cure any ambiguity, omission, defect or inconsistency that does not adversely affect holders of the notes;
- ∅ to provide for the assumption of our obligations under the indenture by a successor upon any merger, consolidation or asset transfer permitted under the indenture and to provide for conversion of the notes into reference property;
- ∅ to provide any security for or add guarantees with respect to the notes;
- ∅ to comply with any requirement of the SEC in connection with the qualification of the indenture under the Trust Indenture Act;
- ∅ to add covenants that would benefit the holders of notes or to surrender any rights we have under the indenture;
- ∅ to provide for a successor trustee in accordance with the terms of the indenture or to otherwise comply with any requirement of the indenture;
- ∅ to provide for the issuance of additional notes, to the extent that we deem such amendment necessary or advisable in connection with such issuance; provided that no such amendment or supplement may impair the rights or interests of any holder of the outstanding notes;
- ∅ to increase the conversion rate;
- ∅ to add events of default with respect to the notes;
- ∅ to add circumstances under which we will pay additional interest on the notes;
- ∅ to make any change that does not adversely affect the rights of any holder of outstanding notes; or
- ∅ to conform the provisions of the indenture to the Description of notes section in this prospectus supplement, which shall be evidenced by an Officer's Certificate of the Company to that effect.

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The consent of the holders of the notes is not necessary under the indenture to approve the particular form of any proposed amendment. It is sufficient if such consent approves the substance of the proposed amendment. After an amendment under the indenture becomes effective, we are required to mail to the holders of the notes a notice briefly describing such amendment. However, with respect to amendments that do not require the consent of holders of notes, the failure to give such notice to all the holders of the notes, or any defect in the notice, will not impair or affect the validity of the amendment.

### **NOTES NOT ENTITLED TO CONSENT**

Any notes held by us or by any person directly or indirectly controlling or controlled by or under direct or indirect common control with us shall be disregarded (from both the numerator and the denominator) for purposes of determining whether the holders of the requisite aggregate principal amount of the outstanding notes have consented to a modification, amendment or waiver of the terms of the indenture.

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**Description of notes**

**DISCHARGE**

We may satisfy and discharge our obligations under the indenture by delivering to the trustee all outstanding notes for cancellation or, when all outstanding notes have become due and payable, by depositing with the trustee or delivering to the holders, as applicable, cash and/or shares of common stock sufficient to pay all amounts due at maturity.

**REPURCHASE AND CANCELLATION**

We may, to the extent permitted by law, repurchase any notes in the open-market or by tender offer at any price or by private agreement. Neither we nor our affiliates may resell such securities unless such resale is registered under the Securities Act or such resale is pursuant to an exemption from the registration requirements of the Securities Act that results in such securities not being restricted securities, as such term is defined in Rule 144(a)(3) under the Securities Act. Any notes repurchased by us may, at our option, be surrendered to the trustee for cancellation. Any notes surrendered for cancellation may not be reissued or resold and will be promptly cancelled.

**INFORMATION CONCERNING THE TRUSTEE**

We have appointed Wells Fargo Bank, National Association, the trustee under the indenture, as paying agent, conversion agent, bid solicitation agent, notes registrar and custodian for the notes. The trustee or its affiliates may also provide other services to us in the ordinary course of their business. The indenture contains certain limitations on the rights of the trustee, if it or any of its affiliates is then our creditor, to obtain payment of claims in certain cases or to realize on certain property received on any claim as security or otherwise. The trustee and its affiliates will be permitted to engage in other transactions with us. However, if the trustee or any affiliate continues to have any conflicting interest and a default occurs with respect to the notes, the trustee must eliminate such conflict or resign.

**NO STOCKHOLDER RIGHTS FOR HOLDERS OF NOTES**

Holders of the notes, as such, will not have any rights as our stockholders (including, without limitation, voting rights and rights to receive any dividends or other distributions on our common stock).

**COMPLIANCE WITH NASDAQ STOCKHOLDER APPROVAL RULES**

We will not take any voluntary action that would result in an adjustment pursuant to any of the provisions described in clauses (2) through (5) of Conversion Rate Adjustments, Adjustment to Conversion Rate Upon Conversion Upon Make-Whole Fundamental Changes and Redemption of Notes at the Company's Option Optional Redemption by the Company without complying, if applicable, with the stockholder approval rules of the NASDAQ Global Stock Market (including NASDAQ Market Rule 5635, which requires stockholder approval of certain issuances of our common stock) or any similar rule of any other stock exchange on which our common stock is listed at the relevant time.

**REPORTS**

So long as any notes are outstanding, we will be required to deliver to the trustee, within 15 calendar days after we would have been required to file with the SEC (giving effect to any grace period provided

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### **Description of notes**

by Rule 12b-25 under the Exchange Act), copies of our annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the SEC may by rules and regulations prescribe) which we are required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act. Documents filed by us with the SEC via its EDGAR system (or any successor thereto) will be deemed to be filed with the trustee as of the time such documents are so filed. In the event we are at any time no longer subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, we shall continue to provide the trustee with reports containing substantially the same information as would have been required to be filed with the SEC had we continued to have been subject to such reporting requirements. In such event, such reports shall be provided at the times we would have been required to provide reports had we continued to have been subject to such reporting requirements. We also shall comply with the other provisions of Section 314(a) of the Trust Indenture Act and will furnish to holders, beneficial owners and prospective purchasers of the notes or shares of common stock issuable upon conversion of the notes, upon their request, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act; provided, however, that the trustee shall have no responsibility whatsoever to determine whether such filings or postings have been made.

### **GOVERNING LAW**

The indenture provides that it and the notes will be governed by, and construed in accordance with, the laws of the State of New York without regard to conflict of law principles thereof.

### **CALCULATIONS IN RESPECT OF NOTES**

We will be responsible for making all calculations called for under the notes. These calculations include, but are not limited to, determinations of the last reported sale prices of our common stock, the conversion rate of the notes and accrued interest payable on the notes. We will make all these calculations in good faith and, absent manifest error, our calculations will be final and binding on holders of notes. We will provide a schedule of our calculations to each of the trustee and the conversion agent, and each of the trustee and conversion agent is entitled to rely conclusively upon the accuracy of our calculations without independent verification. The trustee will forward our calculations to any holder of notes upon the request of that holder.

### **FORM, DENOMINATION AND REGISTRATION**

The notes will be issued:

Ø in fully registered form;

Ø without interest coupons; and

Ø in minimum denominations of \$1,000 principal amount and whole multiples of \$1,000.

### **GLOBAL NOTES, BOOK-ENTRY FORM**

The notes will be initially issued in the form of one or more registered notes in global form, without interest coupons (the global notes). Upon issuance, each of the global notes will be deposited with the trustee as custodian for DTC and registered in the name of Cede & Co., as nominee of DTC.



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Ownership of beneficial interests in a global note will be limited to persons who have accounts with DTC ( DTC participants ) or persons who hold interests through DTC participants. We expect that under procedures established by DTC:

Ø upon deposit of a global note with DTC s custodian, DTC will credit portions of the principal amount of the global note to the accounts of the DTC participants designated by the underwriters; and

Ø ownership of beneficial interests in a global note will be shown on, and transfer of ownership of those interests will be effected only through, records maintained by DTC (with respect to interests of DTC participants) and the records of DTC participants (with respect to other owners of beneficial interests in the global note).

Beneficial interests in global notes may not be exchanged for notes in physical, certificated form except in the limited circumstances described below.

All interests in the global notes will be subject to the operations and procedures of DTC. We provide the following summary of those operations and procedures solely for the convenience of investors. The operations and procedures of DTC are controlled by that settlement system and may be changed at any time. Neither we nor the underwriters are responsible for those operations or procedures.

DTC has advised us that it is:

Ø a limited purpose trust company organized under the laws of the State of New York;

Ø a banking organization within the meaning of the New York State Banking Law;

Ø a member of the Federal Reserve System;

Ø a clearing corporation within the meaning of the Uniform Commercial Code; and

Ø a clearing agency registered under Section 17A of the Exchange Act.

DTC was created to hold securities for its participants and to facilitate the clearance and settlement of securities transactions between its participants through electronic book-entry changes to the accounts of its participants. DTC s participants include securities brokers and dealers, including the underwriters; banks and trust companies; clearing corporations and other organizations. Indirect access to DTC s system is also available to others such as banks, brokers, dealers and trust companies; these indirect participants clear through or maintain a custodial relationship with a DTC participant, either directly or indirectly. Investors who are not DTC participants may beneficially own securities held by or on behalf of DTC only through DTC participants or indirect participants in DTC.

So long as DTC s nominee is the registered owner of a global note, that nominee will be considered the sole owner or holder of the notes represented by that global note for all purposes under the indenture. Except as provided below, owners of beneficial interests in a global note:

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- ∅ will not be entitled to have notes represented by the global note registered in their names;
- ∅ will not receive or be entitled to receive physical, certificated notes; and
- ∅ will not be considered the owners or holders of the notes under the indenture for any purpose, including with respect to the giving of any direction, instruction or approval to the trustee under the indenture.

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As a result, each investor who owns a beneficial interest in a global note must rely on the procedures of DTC to exercise any rights of a holder of notes under the indenture (and, if the investor is not a participant or an indirect participant in DTC, on the procedures of the DTC participant through which the investor owns its interest).

Payments of principal and interest with respect to the notes represented by a global note will be made by the paying agent to DTC's nominee as the registered holder of the global note. Neither we nor the paying agent will have any responsibility or liability for the payment of amounts to owners of beneficial interests in a global note, for any aspect of the records relating to or payments made on account of those interests by DTC, or for maintaining, supervising or reviewing any records of DTC relating to those interests.

Payments by participants and indirect participants in DTC to the owners of beneficial interests in a global note will be governed by standing instructions and customary industry practice and will be the responsibility of those participants or indirect participants and DTC.

Transfers between participants in DTC will be effected under DTC's procedures and will be settled in same-day funds.

### **CERTIFICATED NOTES**

Notes in physical, certificated form will be issued and delivered to each person that DTC identifies as a beneficial owner of the related notes only if:

- Ø DTC notifies us at any time that it is unwilling or unable to continue as depositary for the global notes and a successor depositary is not appointed within 90 calendar days;
- Ø DTC ceases to be registered as a clearing agency under the Exchange Act and a successor depositary is not appointed within 90 calendar days;
- Ø we, at our option, notify the trustee that we elect to cause the issuance of certificated notes, subject to DTC's procedures; or
- Ø certain other events provided in the indenture should occur.

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## Material United States federal income tax considerations

**TO ENSURE COMPLIANCE WITH TREASURY DEPARTMENT CIRCULAR 230, HOLDERS ARE HEREBY NOTIFIED THAT (I) ANY DISCUSSION OF FEDERAL TAX ISSUES CONTAINED OR REFERRED TO IN THIS STATEMENT IS NOT INTENDED OR WRITTEN TO BE USED, AND CANNOT BE USED, BY HOLDERS FOR THE PURPOSE OF AVOIDING PENALTIES THAT MAY BE IMPOSED ON THEM UNDER THE INTERNAL REVENUE CODE OF 1986, AS AMENDED (THE CODE ); (II) SUCH DISCUSSION IS WRITTEN IN CONNECTION WITH THE PROMOTION OR MARKETING OF THE TRANSACTIONS OR MATTERS ADDRESSED HEREIN; AND (III) HOLDERS SHOULD SEEK ADVICE BASED ON THEIR PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR.**

The following discussion is a summary of the material U.S. federal income tax consequences relevant to the purchase, ownership and disposition of the notes and of the ownership and disposition of common stock received upon a conversion of the notes, but does not purport to be a complete analysis of all potential tax effects. This summary is based on the Code, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations, changes to any of which subsequent to the date of this prospectus supplement may affect the tax consequences described herein (possibly with retroactive effect). The summary does not address federal tax consequences other than income tax consequences or any state, local or foreign tax consequences. Persons considering the purchase of notes are urged to consult their tax advisors with regard to the application of the U.S. federal income tax laws to their particular situations as well as any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction. We have not sought, nor will we seek, any rulings from the Internal Revenue Service, or the IRS, with respect to the matters discussed below. There can be no assurance that the IRS will not take a different position concerning the tax consequences of the purchase, ownership or disposition of the notes or common stock or that any such position would not be sustained.

This discussion only applies to initial holders of notes who purchase notes at the issue price, which will equal the first price to the public (not including bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers) at which a substantial amount of the notes is sold for money. This discussion assumes that each holder holds the notes and common stock received upon a conversion of the notes as a capital asset.

This discussion does not describe all of the tax consequences that may be relevant to holders in light of their particular circumstances or to holders subject to special rules, such as:

- ∅ certain financial institutions;
  
- ∅ tax-exempt organizations;
  
- ∅ insurance companies;
  
- ∅ dealers in stock and securities or foreign currencies;
  
- ∅ traders in securities who elect the mark-to-market method of accounting for their securities;
  
- ∅ regulated investment companies;

- Ø real estate investment trusts;
- Ø persons holding notes or common stock as part of a hedge, straddle, conversion or other integrated or risk reduction transaction;
- Ø U.S. Holders (as defined below) whose functional currency is not the U.S. dollar;

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### **Material United States federal income tax considerations**

Ø persons subject to the alternative minimum tax; or

Ø certain former citizens or former long-term residents of the U.S.

If a partnership or other entity classified as a partnership for U.S. federal income tax purposes holds notes or common stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding notes or common stock, you should consult your tax advisor.

**Prospective investors should consult their own independent tax advisors with regard to the application of the tax consequences discussed below to their particular situations as well as the application of any state, local, foreign or other tax laws, including gift and estate tax laws and any applicable tax treaty.**

### **U.S. HOLDERS**

As used herein, "U.S. Holder" means a beneficial owner of a note or common stock who or that is for U.S. federal income tax purposes:

Ø an individual that is a citizen or resident of the U.S.;

Ø a corporation (including an entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the U.S., any state thereof or the District of Columbia;

Ø an estate, the income of which is subject to U.S. federal income tax regardless of its source; or

Ø a trust, if (i) a U.S. court can exercise primary supervision over the administration of the trust and one or more U.S. persons can control all substantial trust decisions or (ii) if the trust was in existence on August 20, 1996, it has elected to continue to be treated as a U.S. person.

### **Interest**

It is expected, and this discussion assumes, that the notes will be issued at an issue price equal to their principal amount and that accordingly the notes will be issued without original issue discount for U.S. federal income tax purposes. Accordingly, interest paid on a note will be taxable to a U.S. Holder as ordinary interest income at the time it accrues or is received in accordance with the holder's method of accounting for U.S. federal income tax purposes.

If contrary to our assumption, the notes are issued with original issue discount ("OID") for U.S. federal income tax purposes, U.S. Holders will be subject to special rules. The notes will be deemed to be issued with OID if the stated principal amount of the notes exceeds the issue price of the notes by an amount equal to or greater than the product of 25 basis points and the number of years to complete maturity. A U.S. Holder generally will be required to include the OID in gross income in advance of the receipt of cash attributable to that income and regardless of such holder's regular method of tax accounting. Such OID will be included in gross income using a constant yield method, in which case the U.S. Holder will have to include in income increasingly greater amounts of OID in successive accrual periods. A U.S. Holder's adjusted tax basis in a note will be increased by any OID previously included in income with respect to that note. All holders are urged to consult their own tax advisors regarding the application of the OID rules to their particular circumstances.

### **Additional Amounts**

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In certain circumstances (see Description of notes Events of Default; Notice and Waiver and Description of notes Redemption of Notes at the Company s Option ), we may be obligated to pay

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### **Material United States federal income tax considerations**

amounts in excess of the stated interest and principal payable on the notes, which may implicate the provisions of Treasury regulations relating to contingent payment debt instruments. We believe there is only a remote possibility that we will be obligated to make any such contingent payments on the notes and therefore intend to take the position that the notes should not be treated as contingent payment debt instruments. Assuming such position is respected, a U.S. Holder would be required to include the amount of any such payments in income as ordinary interest income at the time such payments are received or accrued in accordance with such U.S. Holder's method of accounting for U.S. federal income tax purposes. If the IRS successfully challenged this position, and the notes were treated as contingent payment debt instruments because of the possibility of such payments, U.S. Holders might, among other things, be required to accrue interest income at a higher rate than the stated interest rate on the notes and to treat any gain recognized on the sale or other disposition of a note (including any gain realized on the conversion of a note) as ordinary income rather than as capital gain. Our determination that the notes are not contingent payment debt instruments is binding on each U.S. Holder unless such holder discloses a contrary position to the IRS in the manner that is required by applicable Treasury regulations. The remainder of this discussion assumes that the notes are not treated as contingent payment debt instruments.

Purchasers of notes are urged to consult their tax advisors regarding the possible application of the contingent payment debt instrument rules to the notes.

### **Sale, Exchange or Redemption of the Notes**

Upon the sale, exchange or redemption of a note (other than a conversion solely into common stock, as described in Conversion of the Notes below), a U.S. Holder will generally recognize taxable gain or loss equal to the difference between (1) the amount of cash proceeds and the fair market value of any property received on the sale, exchange or redemption (except to the extent such amount is attributable to accrued interest, which is taxable as ordinary income if not previously included in income) and (2) such U.S. Holder's adjusted tax basis in the note. A U.S. Holder's adjusted tax basis in a note generally will be the U.S. Holder's cost therefor, plus the amount, if any, included in income on an adjustment to the conversion rate of the notes, as described in Constructive Distributions below. Such recognized gain or loss generally will be capital gain or loss, and if the U.S. Holder is an individual that has held the note for more than one year, such capital gain will generally be subject to tax at long-term capital gain rates. The long-term capital gains rate for individuals is currently 15% for any proceeds received prior to January 1, 2013 (when rates are scheduled to increase to 20%). A U.S. Holder's ability to deduct capital losses may be limited.

### **Conversion of the Notes**

Upon conversion of a note, a U.S. Holder generally will not recognize any income, gain or loss upon the conversion of the note, including the receipt of any coupon make-whole payments, except with respect to any cash received in lieu of a fractional share of stock (which will be treated as if such fractional share had been received and then sold and the sale will be treated as described under Sale, Exchange, or Other Disposition of Common Stock below) and with respect to any cash or common stock received attributable to accrued interest (which will be treated as described under Interest above). A U.S. Holder's tax basis in the stock received upon conversion generally will equal such holder's tax basis in the note converted plus any income attributable to accrued interest, reduced by the portion of the tax basis that is allocable to any fractional share, and the U.S. Holder's holding period for such common stock generally would include the period during which the U.S. Holder held the note.

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**Material United States federal income tax considerations**

To the extent a U.S. Holder receives a cash payment in respect of the coupon make-whole provision, such U.S. Holder may be required to recognize additional taxable income as a result of the payment. The tax rules regarding the treatment of the coupon make-whole payment are unclear and it is unsettled whether these amounts will be taxed immediately and how a holder's tax basis in their note will be impacted by the receipt of such a payment. Except to the extent attributable to accrued interest (as noted above), we do not intend to treat the balance of any cash portion of the make-whole payment as additional interest. As a result, we strongly encourage you to consult with your tax advisor concerning the potential tax treatment of such a payment.

**Constructive Distributions**

Holders of convertible debt instruments such as the notes may, in certain circumstances that increase a holder's proportionate interest in our assets or earnings and profits, be deemed to have received constructive distributions where the conversion rate of such instrument is adjusted. Adjustments to the conversion rate made pursuant to a bona fide reasonable adjustment formula that has the effect of preventing the dilution of the interest of the holders of the debt instruments will generally not be considered to result in a constructive distribution of stock. However, certain of the possible adjustments provided in the notes, including, without limitation, adjustments in respect of taxable dividends to our stockholders, will not qualify as being pursuant to a bona fide reasonable adjustment formula. If such adjustments are made, the holders of notes will be deemed to have received constructive distributions in amounts based on the value of such holders' increased interests in our equity resulting from such adjustments, even though they have not received any cash or property as a result of such adjustments, except that it is unclear whether such deemed distributions would be eligible for the reduced tax rate applicable to certain dividends paid to non-corporate holders or the dividend-received deduction applicable to certain dividends paid to corporate holders. Generally, a U.S. Holder's tax basis in a note will be increased to the extent any such constructive distribution is treated as a dividend. An increase in the conversion rate for notes converted in connection with a make-whole fundamental change may also be treated as a taxable constructive distribution. In certain circumstances, the failure to make a conversion rate adjustment may result in a deemed distribution to the holders of the notes, if, as a result of such failure, the proportionate interest of the note holders in our assets or earnings is increased.

U.S. Holders should consult their own tax advisors concerning the potential for and tax consequences of receiving constructive distributions, including any potential consequences of such distributions for the tax basis and holding period of their common stock.

**Distributions on Common Stock**

Distributions, if any, other than certain pro rata distributions of common stock, paid or deemed paid on our common stock generally will be treated as dividends to the extent of our current or accumulated earnings and profits, as determined for U.S. federal income tax purposes. Subject to certain eligibility requirements and limitations (including holding periods), (1) qualifying dividends paid to individual U.S. Holders before January 1, 2013 are taxed at the rates applicable to long-term capital gains (but after that date at the rates generally applicable to ordinary income) and (2) dividends paid to corporate U.S. Holders will qualify for the dividend-received deduction. Distributions on our common stock that exceed our current and accumulated earnings and profits will be treated first as a non-taxable return of capital, reducing the holder's tax basis in the shares of common stock and, thereafter, as a capital gain from the sale or exchange of such stock.

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### **Material United States federal income tax considerations**

#### **Sale, Exchange or Other Disposition of Common Stock**

Upon the sale, exchange or other taxable disposition of common stock, a U.S. Holder generally will recognize capital gain or loss equal to the difference between (1) the cash and the fair market value of any property received for the common stock (less accrued interest, which will be taxable as such) and (2) such U.S. Holder's tax basis in the common stock. The holder's tax basis and holding period in the common stock received upon conversion will be determined in the manner described above under Conversion of the Notes. Any capital gain or loss recognized by a holder of common stock will be long-term capital gain or loss if the holding period attributable to such common stock is more than one year at the time of such sale or exchange. Long-term capital gain of an individual U.S. Holder is eligible for a reduced rate of tax. The long-term capital gains rate for individuals is currently 15% for any proceeds received prior to January 1, 2013 (when rates are scheduled to increase to 20%). The deductibility of capital losses is subject to limitations.

#### **Information Reporting and Backup Withholding**

Information returns will be furnished to U.S. Holders and filed with the IRS in connection with payments on the notes, dividends on our common stock (including constructive distributions on the notes treated as dividends) and the proceeds from a sale or other disposition of the notes or our common stock, unless the U.S. Holder is an exempt recipient such as a corporation. A U.S. Holder will be subject to backup withholding on these payments if the U.S. Holder fails to provide its taxpayer identification number to the paying agent and comply with certain certification procedures or otherwise establish an exemption from backup withholding. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle the U.S. Holder to a refund, provided that the required information is timely furnished to the IRS.

#### **New Legislation Regarding Medicare Tax**

For taxable years beginning after December 31, 2012, certain U.S. Holders who are individuals, estates or trusts may be subject to a 3.8% tax on all or a portion of their net investment income. For individual U.S. Holders, the additional Medicare tax applies to the lesser of (i) net investment income or (ii) the excess of modified adjusted gross income over \$200,000 (\$250,000 if married filing jointly or \$125,000 if married filing separately). Net investment income generally includes passive income, which may include all or a portion of the interest on notes and dividends on shares of our common stock and net gains from the disposition of notes and shares of our common stock. U.S. Holders that are individuals, estates or trusts are urged to consult their tax advisors regarding the applicability of the Medicare tax to any of their income or gains in respect of notes and shares of our common stock.

#### **NON-U.S. HOLDERS**

The following discussion is limited to the U.S. federal income tax consequences relevant to a Non-U.S. Holder. For these purposes, a Non-U.S. Holder is a beneficial owner of a note or common stock (other than a partnership) that is not a U.S. Holder as defined above.

If a partnership or other entity classified as a partnership for U.S. federal income tax purposes holds notes or common stock, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding notes or common stock, you should consult your tax advisor.

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### **Material United States federal income tax considerations**

#### **Interest**

Subject to the discussion of backup withholding below and the discussion of withholding on foreign accounts below, interest paid to a Non-U.S. Holder will not be subject to U.S. federal income or withholding tax, provided that:

- ∅ such holder does not directly or indirectly, actually or constructively, own 10% or more of the total combined voting power of all classes of our stock entitled to vote, within the meaning of the Code and applicable Treasury regulations;
- ∅ such holder is not a controlled foreign corporation that is related to us actually or constructively through stock ownership;
- ∅ such holder is not a bank receiving interest on a loan entered into in the ordinary course of its trade or business;
- ∅ such interest is not effectively connected with the conduct by the Non-U.S. Holder of a trade or business within the U.S.; and
- ∅ we, or our paying agent, receive appropriate documentation (generally an IRS Form W-8BEN) establishing that the Non-U.S. Holder is not a U.S. person.

A Non-U.S. Holder that does not qualify for exemption from withholding under the preceding paragraph generally will be subject to withholding of U.S. federal income tax at a 30% rate (or a reduced treaty rate) on payments of interest on the notes.

If interest on the notes is effectively connected with the conduct by a Non-U.S. Holder of a trade or business within the U.S., subject to the provisions of an applicable income tax treaty, such interest will be subject to U.S. federal income tax on a net income basis at the rate applicable to U.S. persons generally (and, with respect to corporate holders, may also be subject to a branch profits tax at 30% or a reduced treaty rate). If interest is subject to U.S. federal income tax on a net income basis in accordance with these rules, such payments will not be subject to U.S. withholding tax so long as the Non-U.S. Holder provides us or our paying agent with the appropriate documentation (generally an IRS Form W-8ECI).

#### **Sale, Exchange or Other Disposition of the Notes or Shares of Common Stock**

Subject to the discussion of backup withholding below, any gain realized by a Non-U.S. Holder on the sale, exchange or other disposition of a note or shares of our common stock generally will not be subject to U.S. federal income tax, unless:

- ∅ such gain is effectively connected with the conduct by such Non-U.S. Holder of a trade or business within the U.S., subject to an applicable income tax treaty providing otherwise;
- ∅ such Non-U.S. Holder is an individual present in the U.S. for 183 days or more in the taxable year of disposition of the notes or common stock and certain other conditions are satisfied; or

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Ø in the case of the common stock, we are or have been a U.S. real property holding corporation as defined below, at any time within the five-year period preceding the disposition or the Non-U.S. Holder's holding period, whichever period is shorter.

Except to the extent that an applicable income tax treaty provides otherwise, a Non-U.S. Holder described in the first bullet point above will be subject to U.S. federal income tax on a net income basis at the rate applicable to U.S. persons generally (and, with respect to corporate holders, may also be subject to a branch profits tax at 30% or a reduced treaty rate).

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### **Material United States federal income tax considerations**

A Non-U.S. Holder described in the second bullet point above will generally be subject to a flat 30% tax on the gain derived from the disposition of the notes or common stock, which may be offset by certain U.S. source capital losses, even though such holder is not considered a resident of the U.S.

With respect to the third bullet point above, we believe that we are not, and do not anticipate becoming, a U.S. real property holding corporation. Generally, a corporation is a U.S. real property holding corporation if the fair market value of its U.S. real property interests, as defined in the Code and applicable regulations, equals or exceeds 50% of the aggregate fair market value of its worldwide real property interests and its other assets used or held for use in a trade or business. Even if we were, or were to become, a U.S. real property holding corporation, no adverse tax consequences would apply to you if you hold, directly or indirectly, at all times during the applicable period, five percent or less of the common stock, provided that such common stock was regularly traded on an established securities market.

### **Conversion of the Notes**

A Non-U.S. Holder's conversion of a note solely for common stock will be treated in a manner similar to that described in

U.S. Holders' Conversion of the Notes except to the extent a holder receives cash or common stock attributable to accrued interest (which will be taxable as interest).

### **Dividends**

Dividends (including deemed dividends on the notes described above under U.S. Holders' Constructive Distributions) paid to a Non-U.S. Holder of common stock generally will be subject to withholding tax at a 30% rate or a reduced rate specified by an applicable income tax treaty. In the case of a deemed dividend, because such deemed dividends will not give rise to any cash from which any applicable withholding tax can be satisfied, a Non-U.S. Holder may be subject to withholding from subsequent cash payments of interest or from cash or shares of our common stock otherwise deliverable to a Non-U.S. Holder upon conversion, redemption or repurchase of a note. In order to obtain a reduced rate of withholding, a Non-U.S. Holder will be required to provide an IRS Form W-8BEN certifying its entitlement to benefits under a treaty.

The withholding tax does not apply to dividends paid to a Non-U.S. Holder who provides a Form W-8ECI, certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the U.S. and, where a tax treaty applies, are attributable to a U.S. permanent establishment. Instead, the effectively connected dividends will be subject to regular U.S. income tax as if the Non-U.S. Holder were a U.S. resident. A non-U.S. corporation receiving effectively connected dividends may also be subject to an additional branch profits tax imposed at a rate of 30% (or a reduced treaty rate).

### **Information Reporting and Backup Withholding**

Information returns will be furnished to Non-U.S. Holders and filed with the IRS in connection with payments on the notes and the common stock and the amount of tax, if any, withheld with respect to those payments. Copies of the information returns reporting such interest and dividend payments and any withholding may also be made available to the tax authorities in the country in which the Non-U.S. Holder resides under the provisions of an applicable income tax treaty. Unless the Non-U.S. Holder complies with certification procedures to establish that it is not a U.S. person, information returns may be filed with the IRS in connection with the proceeds from a sale or other disposition of the notes or common stock, and the Non-U.S. Holder may be subject to backup withholding on payments on the notes or common stock or on the proceeds from a sale or other

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### **Material United States federal income tax considerations**

disposition of the notes or common stock. The certification procedures required to claim the exemption from withholding tax on interest described above will satisfy the certification requirements necessary to avoid backup withholding as well. The amount of any backup withholding from a payment to a Non-U.S. Holder will be allowed as a credit against the Non-U.S. Holder's U.S. federal income tax liability and may entitle the Non-U.S. Holder to a refund, provided that the required information is timely furnished to the IRS.

### **Legislation Relating to Withholding on Foreign Accounts**

Legislation enacted in 2010 may impose withholding taxes on certain types of payments made to foreign financial institutions (as specifically defined in this legislation) and certain other non-U.S. entities (including financial intermediaries). Under this legislation, failure to comply with additional certification, information reporting and other specified requirements could result in withholding tax being imposed on payments of interest, dividends and sales proceeds of any property of a type which can produce U.S. source interest or dividends to foreign intermediaries and certain Non-U.S. Holders. The legislation imposes a 30% withholding tax on interest, dividends, or gross proceeds from the sale or other disposition of common stock or notes paid to a foreign financial institution or to a non-financial foreign entity, unless (i) the foreign financial institution undertakes certain diligence and reporting obligations or (ii) the non-financial foreign entity either certifies it does not have any substantial U.S. owners or furnishes identifying information regarding each substantial U.S. owner. If the payee is a foreign financial institution, it must enter into an agreement with the U.S. Treasury requiring, among other things, that it undertake to identify accounts held by certain U.S. persons or U.S.-owned foreign entities, annually report certain information about such accounts, and withhold 30% on payments to account holders whose actions prevent it from complying with these reporting and other requirements. The IRS has issued proposed regulations under which debt instruments issued prior to January 1, 2013 will be exempt from these rules; if finalized in their current form, these regulations would therefore generally provide an exception to these rules for the notes (but not our common stock). Under certain transition rules, any obligation to withhold under the legislation with respect to payments of interest on the notes and payments of dividends on common stock will not begin until January 1, 2014, and with respect to the gross proceeds of a sale or other disposition of the notes or our common stock, will not begin until January 1, 2015. Prospective investors should consult their tax advisors regarding this legislation.

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## Underwriting

We are offering \$40,000,000 aggregate principal amount of our notes described in this prospectus supplement and the accompanying prospectus through the underwriters named below. UBS Securities LLC and Piper Jaffray & Co. are acting as joint book-running managers of this offering and as the representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Each of the underwriters has severally agreed to purchase notes in the principal amounts listed next to its name in the following table.

Underwriters	Principal Amount of Notes
UBS Securities LLC	\$ 21,800,000
Piper Jaffray & Co.	\$ 18,200,000
<b>Total</b>	<b>\$ 40,000,000</b>

The underwriting agreement provides that the underwriters must buy all of the notes if they buy any of them. However, the underwriters are not required to take or pay for the notes covered by the underwriters' over-allotment option described below.

Our notes are offered subject to a number of conditions, including:

Ø receipt and acceptance of our notes by the underwriters; and

Ø the underwriters' right to reject orders in whole or in part.

In connection with this offering, the underwriters or securities dealers may distribute prospectuses electronically.

Concurrently with this offering of notes, we are offering 12,500,000 shares of our common stock. The underwriters of this offering are also acting as the underwriters of the concurrent common stock offering. The closing of this notes offering and the closing of the concurrent common stock offering are not conditioned on each other.

### **OVER-ALLOTMENT OPTION**

We have granted the underwriters an option to buy up to an additional \$5,000,000 aggregate principal amount of the notes. UBS Securities LLC may exercise this option on behalf of the several underwriters solely for the purpose of covering over-allotments, if any, made in connection with this offering. UBS Securities LLC has 30 days from the date of this prospectus supplement to exercise this option.

### **COMMISSIONS AND DISCOUNTS**

Notes sold by the underwriters to the public will initially be offered at the public offering price set forth on the cover of this prospectus supplement, plus accrued interest from the original issue date of the notes, if any. Any notes sold by the underwriters to securities dealers may be sold at a discount of up to 3.6% of the principal amount of the notes. Sales of notes made outside the United States may be made by affiliates of the underwriters. If all the notes are not sold at the public offering price, the underwriters may change the offering price and the other selling terms. Upon execution of the underwriting agreement, the underwriters will be obligated to purchase the notes at the prices and upon the terms stated therein.

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**Table of Contents****Underwriting**

The following table shows the per note and total underwriting discounts and commissions we will pay to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional notes.

	No exercise	Full exercise
Per Note	6%	6%
Total	2,400,000	2,700,000

We estimate that the total expenses of this offering payable by us, not including the underwriting discounts and commissions, will be approximately \$1,063,500. We have also agreed to reimburse the underwriters \$150,000 for expenses incurred by them in connection with the concurrent common stock offering. In accordance with FINRA Rule 5110, this reimbursed amount is deemed underwriter compensation for this offering and the concurrent common stock offering.

**NEW ISSUE OF NOTES**

The notes are a new issue of securities with no established trading market. We do not intend to apply for listing of the notes on any national securities exchange or for inclusion of the notes on any automated dealer quotation system. We have been advised by the underwriters that they presently intend to make a market in the notes. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice. We cannot assure the liquidity of the trading market for the notes or that an active public market for the notes will develop. If an active public trading market for the notes does not develop, the market price and liquidity of the notes may be adversely affected. If the notes are traded, they may trade at a discount from their initial public offering price, depending on prevailing interest rates, the market for similar securities, our performance and other factors.

Concurrently with this offering of notes, we are offering 12,500,000 shares of our common stock. The underwriters of this offering are also acting as the underwriters of the concurrent common stock offering, and we have granted the underwriters in the concurrent common stock offering an option to purchase up to an additional 1,875,000 shares of our common stock. The closing of this offering and the closing of the concurrent common stock offering are not conditioned on each other.

**NO SALES OF SIMILAR SECURITIES**

We, and our executive officers and directors have entered into lock-up agreements with the underwriters. Under these agreements, we and each of these persons may not, without the prior written approval of UBS Securities LLC, offer, sell, contract to sell, pledge, or otherwise dispose of, directly or indirectly, or hedge our common stock, any debt securities of the Company or any other securities of the Company that are substantially similar to our common stock or the notes or securities convertible into or exchangeable or exercisable for our common stock, except in the circumstances described below. These restrictions will be in effect for a period of 90 days after the date of this prospectus supplement, which period is subject to extension in the circumstances described below. At any time and without public notice, UBS Securities LLC may, in its sole discretion, release some or all of the securities from these lock-up agreements. The restrictions set forth above are subject to customary exceptions and, in addition to such customary exceptions, shall not apply to:

- Ø the public offering of up to 14,375,000 shares of our common stock pursuant to the underwriting agreement in connection with the concurrent common stock offering;



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### **Underwriting**

- Ø our registration under the Securities Act or the issuance and sale by us of shares of our common stock in connection with any acquisitions or strategic investments as long as (i) the number of shares issued does not exceed 15% of the number of shares of our common stock outstanding immediately after this offering and (ii) each of the recipients of these shares executes a lock-up agreement for the remainder of the lock-up period;
  
- Ø transfers by our executive officers and directors in connection with the receipt or vesting of securities issued by us pursuant to any equity incentive or other compensatory plans, including the withholding by us or the surrender of such securities and/or any sale or other disposition of such securities, solely in order to satisfy tax liabilities with respect to such issuance or vesting or any deemed disposition or deemed sale with respect to such securities; or
  
- Ø transfers by our executive officers and directors pursuant to existing trading plans pursuant to Rule 10b5-1 under the Exchange Act. In the event that either:
  - Ø during the last 15 calendar days plus three business days of the 90-day restricted period, we issue an earnings release or material news or a material event relating to us occurs, or
  
  - Ø prior to the expiration of the 90-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 90-day restricted period, the expiration of the 90-day restricted period will be extended until the expiration of the 15 calendar day plus three business day period beginning on the date of the issuance of an earnings release or the occurrence of the material news or event, as applicable, unless the underwriters waive such extension.

### **INDEMNIFICATION**

We have agreed to indemnify the underwriters against certain liabilities, including certain liabilities under the Securities Act. If we are unable to provide this indemnification, we have agreed to contribute to payments the underwriters may be required to make in respect of those liabilities.

### **NASDAQ STOCK MARKET LISTING**

Our common stock is listed on the NASDAQ Global Market under the symbol GEVO.

### **PRICE STABILIZATION, SHORT POSITIONS**

In connection with this offering, the underwriters may engage in activities that stabilize, maintain or otherwise affect the market prices of the notes and our common stock, including:

- Ø stabilizing transactions;
  
- Ø short sales;

Ø purchases to cover positions created by short sales;

Ø imposition of penalty bids; and

Ø syndicate covering transactions.

Stabilizing transactions consist of bids or purchases made for the purpose of preventing or retarding a decline in the market price of the notes while this offering is in progress. These transactions may also

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### **Underwriting**

include making short sales of the notes, which involve the sale by the underwriters of a greater amount of our notes than they are required to purchase in this offering, and purchasing the notes on the open market to cover positions created by short sales. Short sales may be covered short sales, which are short positions in an amount not greater than the underwriters' over-allotment option referred to above, or may be naked short sales, which are short positions in excess of that amount.

The underwriters may close out any covered short position by either exercising their over-allotment option, in whole or in part, or by purchasing the notes in the open market. In making this determination, the underwriters will consider, among other things, the price of notes available for purchase in the open market as compared to the price at which it may purchase notes through the over-allotment option.

Naked short sales are short sales made in excess of the over-allotment option. The underwriters must close out any naked short position by purchasing notes in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the notes in the open market that could adversely affect investors who purchased in this offering.

The underwriters may impose a penalty bid. This occurs when a particular underwriter repays to the other underwriters a portion of the underwriting discount received by it because the underwriters have repurchased notes sold by or for the account of that underwriter in stabilizing or short covering transactions.

As a result of these activities, the price of our notes may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time. The underwriters may carry out these transactions in the over-the-counter market or otherwise.

### **OTHER RELATIONSHIPS**

The underwriters and certain of their affiliates have in the past provided, are currently providing and may in the future from time to time provide, investment banking and other financing, trading, banking, research, transfer agent and trustee services to the Company, for which they have in the past received, and may currently or in the future receive, customary fees and expenses.

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## Notice to investors

### **NOTICE TO PROSPECTIVE INVESTORS IN THE EUROPEAN ECONOMIC AREA**

In relation to each member state of the European Economic Area (the "EEA") that has implemented the Prospectus Directive (as defined below) (each, a "Relevant Member State"), other than Germany, with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, an offer of securities described in this prospectus supplement may not be made to the public in that Relevant Member State other than:

- Ø to any legal entity which is a qualified investor as defined in the Prospectus Directive;
  
- Ø by the underwriters or the manager to fewer than 100 or, if the Relevant Member State has implemented the relevant provisions of the 2010 PD Amending Directive (as defined below), 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of UBS Securities LLC for any such offer; or
  
- Ø in any other circumstances falling within Article 3(2) of the Prospectus Directive; provided that no such offer of securities shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Directive.

For purposes of this provision, the expression an "offer of securities to the public" in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe for the securities, as the expression may be varied in that member state by any measure implementing the Prospectus Directive in that member state, and the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State. The expression "2010 PD Amending Directive" means Directive 2010/73/EU.

We have not authorized and do not authorize the making of any offer of securities through any financial intermediary on its behalf, other than offers made by the underwriters with a view to the final placement of the securities as contemplated in this prospectus. Accordingly, no purchaser of the securities, other than the underwriters, is authorized to make any further offer of the securities on behalf of us or the underwriters.

The EEA selling restriction is in addition to any other selling restrictions set out in this prospectus.

### **NOTICE TO PROSPECTIVE INVESTORS IN AUSTRALIA**

This prospectus supplement is not a formal disclosure document and has not been, nor will be, lodged with the Australian Securities and Investments Commission. It does not purport to contain all information that an investor or its professional advisers would expect to find in a prospectus or other disclosure document (as defined in the Corporations Act 2001 (Australia)) for the purposes of Part 6D.2 of the Corporations Act 2001 (Australia) or in a product disclosure statement for the purposes of Part 7.9 of the Corporations Act 2001 (Australia), in either case, in relation to the securities.

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**Notice to investors**

The securities are not being offered in Australia to retail clients as defined in Sections 761G and 761GA of the Corporations Act 2001 (Australia). This offering is being made in Australia solely to wholesale clients for the purposes of Section 761G of the Corporations Act 2001 (Australia) and, as such, no prospectus, product disclosure statement or other disclosure document in relation to the securities has been, or will be, prepared.

This prospectus supplement does not constitute an offer in Australia other than to wholesale clients. By submitting an application for our securities, you represent and warrant to us that you are a wholesale client for the purposes of Section 761G of the Corporations Act 2001 (Australia). If any recipient of this prospectus supplement is not a wholesale client, no offer of, or invitation to apply for, our securities shall be deemed to be made to such recipient and no applications for our securities will be accepted from such recipient. Any offer to a recipient in Australia, and any agreement arising from acceptance of such offer, is personal and may only be accepted by the recipient. In addition, by applying for our securities you undertake to us that, for a period of 12 months from the date of issuance of the securities, you will not transfer any interest in the securities to any person in Australia other than to a wholesale client.

**NOTICE TO PROSPECTIVE INVESTORS IN HONG KONG**

Our securities may not be offered or sold in Hong Kong, by means of this prospectus supplement or any document other than (1) to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder, (2) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong), or (3) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap. 32, Laws of Hong Kong). No advertisement, invitation or document relating to our securities may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere) which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the securities which are or are intended to be disposed of only to persons outside Hong Kong or only to professional investors within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

**NOTICE TO PROSPECTIVE INVESTORS IN JAPAN**

Our securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law ) and our securities will not be offered or sold, directly or indirectly, in Japan, or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan, or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

**NOTICE TO PROSPECTIVE INVESTORS IN SINGAPORE**

This document has not been registered as a prospectus with the Monetary Authority of Singapore and in Singapore, the offer and sale of our securities is made pursuant to exemptions provided in Sections 274 and 275 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA ). Accordingly, this

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**Notice to investors**

prospectus supplement and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of our securities may not be circulated or distributed, nor may our securities be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (1) to an institutional investor as defined in Section 4A of the SFA pursuant to Section 274 of the SFA, (2) to a relevant person as defined in Section 275(2) of the SFA pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (3) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to compliance with the conditions (if any) set forth in the SFA. Moreover, this document is not a prospectus as defined in the SFA. Accordingly, statutory liability under the SFA in relation to the content of prospectuses would not apply. Prospective investors in Singapore should consider carefully whether an investment in our securities is suitable for them.

Where our securities are subscribed or purchased under Section 275 of the SFA by a relevant person, which is:

- ∅ by a corporation (which is not an accredited investor as defined in Section 4A of the SFA), the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- ∅ for a trust (where the trustee is not an accredited investor), whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor; shares of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for six months after that corporation or that trust has acquired the shares under Section 275 of the SFA, except:
  - ∅ to an institutional investor (for corporations under Section 274 of the SFA) or to a relevant person defined in Section 275(2) of the SFA, or any person pursuant to an offer that is made on terms that such shares of that corporation or such rights and interest in that trust are acquired at a consideration of not less than S\$200,000 (or its equivalent in a foreign currency) for each transaction, whether such amount is to be paid for in cash or by exchange of securities or other assets, and further for corporations, in accordance with the conditions specified in Section 275 of the SFA;
  - ∅ where no consideration is given for the transfer; or
  - ∅ where the transfer is by operation of law.

In addition, investors in Singapore should note that the securities acquired by them are subject to resale and transfer restrictions specified under Section 276 of the SFA, and they, therefore, should seek their own legal advice before effecting any resale or transfer of their securities.

**NOTICE TO PROSPECTIVE INVESTORS IN SWITZERLAND**

This prospectus supplement does not constitute an issue prospectus pursuant to Article 652a or Article 1156 of the Swiss Code of Obligations (the CO) and the shares will not be listed on the SIX Swiss Exchange. Therefore, this prospectus supplement may not comply with the disclosure standards of the CO and/or the listing rules (including any prospectus schemes) of the SIX Swiss Exchange. Accordingly, the shares may not be offered to the public in or from Switzerland, but only to a selected and limited circle of investors, which do not subscribe to the shares with a view to distribution.

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**Notice to investors**

**NOTICE TO PROSPECTIVE INVESTORS IN THE UNITED KINGDOM**

This prospectus supplement is only being distributed to and is only directed at: (1) persons who are outside the United Kingdom; (2) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order"); or (3) high net worth companies, and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons falling within (1)-(3) together being referred to as "Relevant Persons"). The shares are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such shares will be engaged in only with, Relevant Persons. Any person who is not a Relevant Person should not act or rely on this prospectus supplement or any of its contents.

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## Legal matters

The validity of the securities being offered by this prospectus will be passed upon by our counsel, Paul Hastings LLP, San Diego, California. Covington & Burling LLP, New York, New York, is counsel for the underwriters in connection with this offering.

## Experts

The financial statements as of December 31, 2011 and 2010, and for each of the three years in the period ended December 31, 2011, and for the period from June 9, 2005 (date of incorporation) to December 31, 2011, incorporated by reference in this prospectus and the effectiveness of Gevo, Inc.'s internal control over financial reporting have been audited by Deloitte & Touche, LLP, an independent registered public accounting firm, as stated in their reports (which reports (i) express an unqualified opinion on the consolidated financial statements and include explanatory paragraphs referring to Gevo, Inc.'s status as a development stage enterprise and the change in the method of accounting for preferred stock warrants and (ii) express an unqualified opinion on the effectiveness of internal control over financial reporting), which are incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the reports of such firm given upon their authority as experts in accounting and auditing.

## Information regarding liquidity

Our consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. For the three months ended March 31, 2012, we incurred a consolidated net loss of \$19.3 million and had an accumulated deficit of \$153.9 million. We expect to incur future net losses as we continue to fund the development and commercialization of isobutanol and its product candidates. We have funded our activities since inception primarily through private placements of convertible preferred stock, the issuance of convertible and nonconvertible debt and proceeds raised through our initial public offering.

We anticipate that, through a combination of cash on hand and debt and equity financings, including this offering of notes and the concurrent common stock offering, we will require approximately \$150 million to complete the retrofits to commercial isobutanol production of both the Agri-Energy and Redfield Facilities and to fund operations through December 31, 2013. As of March 31, 2012, we had a cash balance of \$73.6 million. A portion of the net proceeds from this offering of notes and the concurrent common stock offering, or an alternative offering or financing event, are necessary to complete the retrofit of the Agri-Energy Facility to commercial isobutanol production and fund operations through December 31, 2012.

## Where you can find additional information

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference room. The SEC maintains an internet website that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Gevo, Inc. You may also access our reports and proxy statements free of charge at

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our website, <http://www.gevo.com>. The information contained in, or that can be accessed through, our website is not part of this prospectus supplement. The prospectus included in this filing is part of a registration statement filed by us with the SEC. The full registration statement can be obtained from the SEC, as indicated above, or from us.

## Incorporation of certain documents by reference

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. We hereby incorporate by reference the following information or documents into this prospectus supplement and the accompanying prospectus:

- ∅ our Annual Report on Form 10-K for the fiscal year ended December 31, 2011 filed with the SEC on February 28, 2012;
  - ∅ our Amendment No. 1 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2011 filed with the SEC on March 14, 2012;
  - ∅ our Amendment No. 2 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2011 filed with the SEC on April 10, 2012;
  - ∅ our Quarterly Report on Form 10-Q for the three months ended March 31, 2012 filed with the SEC on May 2, 2012;
  - ∅ our Current Reports on Form 8-K filed with the SEC on February 28, 2012, March 14, 2012, March 15, 2012, April 9, 2012, May 1, 2012, May 30, 2012, June 14, 2012, June 18, 2012, June 20, 2012 and June 28, 2012 (excluding any information furnished and not filed pursuant to any such Current Report); and
  - ∅ the description of our common stock contained in our Registration Statement on Form S-1 (File No. 333-168792), filed with the SEC on August 12, 2010, including any subsequent amendment or report filed for the purpose of amending such description.
- Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus supplement or the accompanying prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

We also incorporate by reference any future filings (other than current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, until we sell all of the securities offered by this prospectus supplement. Information in such future filings updates and supplements the information provided in this prospectus supplement. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

Upon written or oral request, we will provide to you, without charge, a copy of any or all of the documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus but not delivered with the prospectus, including exhibits, which are specifically incorporated by reference into such documents. Requests should be directed to: Gevo, Inc., Attention: Investor Relations, 345

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Inverness Drive South, Building C, Suite 310, Englewood, Colorado 80112, telephone (303) 858-8358.

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PROSPECTUS

**\$150,000,000**

**Common Stock**

**Preferred Stock**

**Debt Securities**

**Warrants**

**Units**

From time to time, we may offer up to \$150,000,000 of any combination of the securities described in this prospectus, either individually or in units. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

We will provide the specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement and any related free writing prospectus may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement and any related free writing prospectus, as well as any documents incorporated by reference, before buying any of the securities being offered.

Our common stock is traded on the NASDAQ Global Market under the symbol **GEVO**. On April 5, 2012, the last reported sale price of our common stock on the NASDAQ Global Market was \$9.66. The applicable prospectus supplement will contain information, where applicable, as to any other listing, if any, on the NASDAQ Global Market or any securities market or other exchange of the securities covered by the applicable prospectus supplement.

**Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading Risk Factors contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus.**

**This prospectus may not be used to consummate a sale of any securities unless accompanied by a prospectus supplement.**

The securities may be sold directly by us to investors, through agents designated from time to time or to or through underwriters or dealers, on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled **Plan of Distribution** in this prospectus. If any agents or underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such agents or underwriters and any applicable fees, commissions, discounts and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds that we expect to receive from such sale will also be set forth in a prospectus supplement.

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

**The date of this prospectus is May 8, 2012.**

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## About this prospectus

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission ( SEC ) utilizing a shelf registration process. Under this shelf registration process, we may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, in one or more offerings, up to a total dollar amount of \$150,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of those securities. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. We may also add or update in the prospectus supplement (and in any related free writing prospectus that we may authorize to be provided to you) any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus. We urge you to carefully read this prospectus, any applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading Where You Can Find Additional Information, before buying any of the securities being offered. THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading Where You Can Find Additional Information.

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## Conventions that apply to this prospectus

This prospectus contains estimates and other information concerning our target markets that are based on industry publications, surveys and forecasts, including those generated by SRI Consulting, a division of Access Intelligence, LLC, Chemical Market Associates, Inc., the US Energy Information Association (the EIA), the International Energy Agency (the IEA), the Renewable Fuels Association (the RFA), and Nexant, Inc. (Nexant). Certain target market sizes presented in this report have been calculated by us (as further described below) based on such information. This information involves a number of assumptions and limitations and you are cautioned not to give undue weight to this information. Please read the section of this prospectus entitled "Cautionary Statement Regarding Forward-Looking Statements". The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described under the heading "Risk Factors" contained in the applicable prospectus supplement and any related free writing prospectus, and in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. These and other factors could cause actual results to differ materially from those expressed in these publications, surveys and forecasts.

With respect to calculation of product market volumes:

- Ø product market volumes are provided solely to show the magnitude of the potential markets for isobutanol and the products derived from it. They are not intended to be projections of our actual isobutanol production or sales;
- Ø product market volume calculations for fuels markets are based on data available for the year 2009 (the most current data available from the IEA);
- Ø product market volume calculations for chemicals markets are based on data available for the year 2011 (the most current data available from Nexant); and
- Ø volume data with respect to target market sizes is derived from data included in various industry publications, surveys and forecasts generated by the EIA, the IEA and Nexant.

We have converted these market sizes into volumes of isobutanol as follows:

- Ø we calculated the size of the market for isobutanol as a gasoline blendstock and oxygenate by multiplying the world gasoline market volume by an estimated 12.5% by volume isobutanol blend ratio;
- Ø we calculated the size of the specialty chemicals markets by substituting volumes of isobutanol equivalent to the volume of products currently used to serve these markets;
- Ø we calculated the size of the petrochemicals and hydrocarbon fuels markets by calculating the amount of isobutanol that, if converted into the target products at theoretical yield, would be needed to fully serve these markets (in substitution for the volume of products currently used to serve these markets); and

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Ø for consistency in measurement, where necessary we converted all market sizes into gallons.

Conversion into gallons for the fuels markets is based upon fuel densities identified by Air BP Ltd. and the American Petroleum Institute.

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## Gevo, Inc.

Gevo, Inc. is a renewable chemicals and next generation biofuels company. Our overall strategy is to commercialize biobased alternatives to petroleum-based products using a combination of synthetic biology and chemical technology. In order to implement this strategy, we are taking a building block approach. Initially, we intend to produce and sell isobutanol from renewable feedstocks. Isobutanol is a four carbon alcohol that can be sold directly for use as a specialty chemical in the production of solvents, paints, and coatings or as a value-added fuel blendstock. Isobutanol can also be converted into butenes using straightforward dehydration chemistry deployed in the refining and petrochemicals industries today. The convertibility of isobutanol into butenes is important because butenes are primary hydrocarbon building blocks used in the production of lubricants, rubber, plastics, fibers, other polymers and hydrocarbon fuels. We believe that the products derived from isobutanol have potential applications in approximately 40% of the global petrochemicals market, representing a potential market for isobutanol of approximately 70 billion gallons per year ( BGPY ), and substantially all of the global hydrocarbon fuels market, representing a potential market for isobutanol of approximately 900 BGPY. When combined with a potential specialty chemical market for isobutanol of approximately 1.1 BGPY, and a potential fuel blendstock market for isobutanol of approximately 40 BGPY, we believe that the potential global market for isobutanol is greater than 1,000 BGPY.

We believe that products derived from our isobutanol will be drop-in products, which means that our customers will be able to replace petroleum-based intermediate products with isobutanol-based intermediate products without modification to their equipment or production processes. The final products produced from our isobutanol-based intermediate products will be chemically and visually identical to those produced from petroleum-based intermediate products, except that they will contain carbon from renewable sources. Customer interest in our isobutanol is primarily driven by our cost-efficient production route and our isobutanol's potential to serve as a cost-effective, environmentally sensitive alternative to the petroleum-based intermediate products that they currently use. We believe that at every step of the value chain, renewable products that are chemically identical to the incumbent petrochemical products will have lower market adoption hurdles because the infrastructure and applications for such products already exist. In addition, we believe that products made from biobased isobutanol will be subject to less cost volatility than the petroleum-based products in use today.

In order to produce and sell isobutanol made from renewable sources, we have developed the Gevo Integrated Fermentation Technology<sup>®</sup> ( GIFT<sup>®</sup> ), an integrated technology platform for the efficient production and separation of isobutanol. GIFT<sup>®</sup> consists of two components, proprietary biocatalysts which convert sugars derived from multiple renewable feedstocks into isobutanol through fermentation, and a proprietary separation unit which is designed to continuously separate isobutanol from water during the fermentation process. We developed our technology platform to be compatible with the existing approximately 23 BGPY of global operating ethanol production capacity, as estimated by the RFA. GIFT<sup>®</sup> is designed to allow relatively low capital expenditure retrofits of existing ethanol facilities, enabling a rapid and cost-efficient route to isobutanol production from the fermentation of renewable feedstocks. We believe that our cost-efficient production route will enable rapid deployment of our technology platform and allow our isobutanol and the products produced from it to be economically competitive with many of the petroleum-based products used in the chemicals and fuels markets today.

We expect that the combination of our efficient proprietary technology, our marketing focus on providing drop-in substitutes for incumbent petrochemical products and our relatively low capital investment retrofit approach will mitigate many of the historical issues associated with the commercialization of renewable chemicals and fuels.

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**Gevo, Inc.**

We were incorporated in Delaware in June 2005 under the name Methanotech, Inc. and filed an amendment to our certificate of incorporation changing our name to Gevo, Inc. on March 29, 2006. Our principal executive offices are located at 345 Inverness Drive South, Building C, Suite 310, Englewood, CO 80112, and our telephone number is (303) 858-8358. We maintain an Internet website at [www.gevo.com](http://www.gevo.com). Information contained in or accessible through our website does not constitute part of this prospectus.

Unless otherwise mentioned or unless the context requires otherwise, all references in this prospectus to we, us, and our and refer to Gevo, Inc., a Delaware corporation, and its wholly owned or indirect subsidiaries, and their predecessors.

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## Risk factors

Investing in our securities involves a high degree of risk. You should carefully review the risks and uncertainties described under the heading **Risk Factors** contained in the applicable prospectus supplement and any related free writing prospectus, and under similar headings in the other documents, including our most recent annual report on Form 10-K, and any subsequent quarterly reports on Form 10-Q and current reports on Form 8-K incorporated herein by reference or filed by us after the date of this prospectus, that are incorporated by reference into this prospectus. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations and financial condition.

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## Cautionary statement regarding forward-looking statements

This prospectus and the documents incorporated by reference herein contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the Securities Act ) and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act ). These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements may include, but are not limited to, statements relating to the achievement of advances in our technology platform, the success of our retrofit production model, the availability of suitable and cost-competitive feedstocks, our ability to gain market acceptance for our products, the expected cost-competitiveness and relative performance attributes of our isobutanol and the products derived from it, additional competition, the future price and volatility of petroleum and products derived from petroleum and statements regarding our intended uses of the proceeds of the securities offered hereby. In some cases, you can identify forward-looking statements by terminology such as may, will, should, expect, plan, anticipate, believe, estimate, predict, continue, the negative of such terms or other comparable terminology.

Forward-looking statements reflect our current views about future events, are based on assumptions, and are subject to known and unknown risks and uncertainties. Many important factors could cause actual results or achievements to differ materially from the results, performance or achievements expressed in or implied by our forward-looking statements, including the factors listed below. Many of the factors that will determine future results, performance or achievements are beyond our ability to control or predict. The following are important factors, among others, that could cause actual results, performance or achievements to differ materially from the results or achievements reflected in our forward-looking statements:

- Ø our inability to successfully commercialize isobutanol and the products derived from it;
- Ø our inability to produce commercial quantities of isobutanol in a timely and economic manner;
- Ø unexpected delays, operational difficulties, cost-overruns or failures in the retrofit process;
- Ø our failure to successfully identify and acquire access to additional facilities suitable for efficient retrofitting;
- Ø our failure to market our isobutanol to potential customers;
- Ø fluctuations in the market price of petroleum;
- Ø fluctuations in the market price of corn and other feedstocks;
- Ø our inability to obtain regulatory approval for the use of our isobutanol in our target markets;

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- Ø our failure to adequately protect our intellectual property, or the loss of some of our intellectual property rights through costly litigation or administrative proceedings;
  
  - Ø our failure to transition our preliminary commitments into definitive supply and distribution agreements or to negotiate sufficient long-term supply agreements for our production of isobutanol; and
  
  - Ø general economic conditions and inflation, interest rate movements and access to capital.
- The forward-looking statements contained herein reflect our views and assumptions only as of the date such forward-looking statements are made. You should not place undue reliance on forward-looking statements. Except as required by law, we assume no responsibility for updating any forward-looking

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### Cautionary statement regarding forward-looking statements

statements nor do we intend to do so. Our actual results, performance or achievements could differ materially from the results expressed in, or implied by, these forward-looking statements. The risks included in this section are not exhaustive. Additional factors that could cause actual results to differ materially from those described in the forward-looking statements are set forth in under the heading **Risk Factors** contained in the applicable prospectus supplement and any related free writing prospectus, and in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. You should carefully read both this prospectus, the applicable prospectus supplement and any related free writing prospectus, together with the information incorporated herein by reference as described under the heading **Where You Can Find Additional Information**, completely and with the understanding that our actual future results may be materially different from what we expect.

## The securities we may offer

We may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, with a total value of up to \$150,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- Ø designation or classification;
  
- Ø aggregate principal amount or aggregate offering price;
  
- Ø maturity, if applicable;
  
- Ø original issue discount, if any;
  
- Ø rates and times of payment of interest or dividends, if any;
  
- Ø redemption, conversion, exercise, exchange or sinking fund terms, if any;
  
- Ø ranking;
  
- Ø restrictive covenants, if any;
  
- Ø voting or other rights, if any;

Ø conversion prices, if any; and

Ø important U.S. federal income tax considerations.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add or update information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

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**The securities we may offer**

**THIS PROSPECTUS MAY NOT BE USED TO CONSUMMATE A SALE OF SECURITIES UNLESS IT IS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.**

We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents or underwriters, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities to or through agents or underwriters, we will include in the applicable prospectus supplement:

- Ø the names of those agents or underwriters;
  
- Ø applicable fees, discounts and commissions to be paid to them;
  
- Ø details regarding over-allotment options, if any; and
  
- Ø the net proceeds to us.

*Common Stock.* We may issue shares of our common stock from time to time. The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders and do not have cumulative voting rights. Subject to preferences that may be applicable to any outstanding shares of preferred stock, the holders of common stock are entitled to receive ratably only those dividends as may be declared by our board of directors out of legally available funds. Upon our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any outstanding shares of preferred stock.

*Preferred Stock.* We may issue shares of our preferred stock from time to time, in one or more series. Under our amended and restated certificate of incorporation, our board of directors has the authority, without further action by stockholders, to designate up to 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, qualifications and restrictions granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preferences and sinking fund terms, any or all of which may be greater than the rights of our common stock.

If we sell any series of preferred stock under this prospectus, we will fix the designations, powers, preferences and rights of such series of preferred stock, as well as the qualifications, limitations or restrictions thereon, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

*Debt Securities.* We may issue debt securities from time to time, in one or more series, as either senior secured, senior unsecured or subordinated debt or as senior secured, senior unsecured or subordinated convertible debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be convertible into or exchangeable for our common stock or our other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

The debt securities will be issued under one or more indentures, which are contracts between us and a national banking association or other eligible party, as trustee. In this prospectus, we have summarized certain general features of the debt securities. We urge you, however, to read the applicable prospectus



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### **The securities we may offer**

supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of debt securities being offered, as well as the complete indentures that contain the terms of the debt securities. Forms of indentures have been filed as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

*Warrants.* We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. In this prospectus, we have summarized certain general features of the warrants. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the particular series of warrants being offered, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, forms of the warrant agreements and forms of warrant certificates containing the terms of the warrants being offered.

We will evidence each series of warrants by warrant certificates that we will issue. Warrants may be issued under an applicable warrant agreement that we enter into with a warrant agent. We will indicate the name and address of the warrant agent, if applicable, in the prospectus supplement relating to the particular series of warrants being offered.

*Units.* We may issue, in one or more series, units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in any combination. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of units being offered, as well as the complete unit agreement that contains the terms of the units. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

We will evidence each series of units by unit certificates that we will issue. Units may be issued under a unit agreement that we enter into with a unit agent. We will indicate the name and address of the unit agent, if applicable, in the prospectus supplement relating to the particular series of units being offered.

**Table of Contents****Ratio of earnings to fixed charges**

The following summary is qualified by the more detailed information appearing in the computation table found in Exhibit 12.1 to the registration statement of which this prospectus is part and the historical financial statements, including the notes to those financial statements, incorporated by reference in this prospectus.

Our earnings are inadequate to cover fixed charges. The following table sets forth the dollar amount of the coverage deficiency for all periods (in thousands):

	<b>Year Ended</b>				
	<b>12/31/2011</b>	<b>12/31/2010</b>	<b>12/31/2009</b>	<b>12/31/2008</b>	<b>12/31/2007</b>
Ratio of Earnings to Fixed Charges					
Deficiency of Earnings Available to Cover Fixed Charges	\$ (48,511)	\$ (40,112)	\$ (19,885)	\$ (14,542)	\$ (7,226)

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## Use of proceeds

Except as described in any prospectus supplement or in any related free writing prospectus that we may authorize to be provided to you, we currently intend to use the net proceeds from the sale of the securities offered hereby to acquire access to additional ethanol facilities through direct acquisition, tolling arrangements or joint ventures and to retrofit those facilities, as well as our existing facilities, to produce isobutanol. A portion of the net proceeds from this offering may also be used for general corporate purposes, including, among other things, working capital requirements and potential repayment of indebtedness that may be outstanding at the time of any offering under this prospectus. Pending these uses, we expect to invest the net proceeds in demand deposit accounts or short-term, investment-grade securities.

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## Description of capital stock

### **AUTHORIZED AND OUTSTANDING CAPITAL STOCK**

Our authorized capital stock consists of 100,000,000 shares of common stock, par value \$0.01 per share, and 5,000,000 shares of preferred stock, par value \$0.01 per share, issuable in one or more series designated by our board of directors. As of April 5, 2012, there were 26,758,924 shares of common stock and no shares of preferred stock outstanding.

### **COMMON STOCK**

The holders of our common stock have one vote per share. Holders of common stock are not entitled to vote cumulatively for the election of directors. Generally, all matters to be voted on by stockholders must be approved by a majority, or, in the case of election of directors, by a plurality, of the votes cast at a meeting at which a quorum is present, voting together as a single class, subject to any voting rights granted to holders of any then outstanding preferred stock. Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to participate equally in dividends when and as dividends may be declared by our board of directors out of funds legally available for the payment of dividends. In the event of our voluntary or involuntary liquidation, dissolution or winding up, the prior rights of our creditors and the liquidation preference of any preferred stock then outstanding must first be satisfied. The holders of common stock will be entitled to share in the remaining assets on a pro rata basis. No shares of common stock are subject to redemption or have redemptive rights to purchase additional shares of common stock.

Our common stock is listed on the NASDAQ Global Market under the symbol **GEVO**.

### **PREFERRED STOCK**

Our amended and restated certificate of incorporation provides that we may issue shares of preferred stock from time to time in one or more series. Our board of directors is authorized to fix the voting rights, if any, designations, powers, preferences, qualifications, limitations and restrictions thereof, applicable to the shares of each series of preferred stock. The board of directors may, without stockholder approval, issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of our common stock, including the likelihood that such holders will receive dividend payments and payments upon liquidation, and could have anti-takeover effects, including preferred stock or rights to acquire preferred stock in connection with implementing a stockholder rights plan. The ability of the board of directors to issue preferred stock without stockholder approval could have the effect of delaying, deferring or preventing a change of control or the removal of our existing management. There are currently no shares of preferred stock outstanding.

### **ANTI-TAKEOVER PROVISIONS**

The provisions of the Delaware General Corporation Law ( **DGCL** ), our amended and restated certificate of incorporation, and our amended and restated bylaws contain provisions that could discourage or make more difficult a change in control of Gevo®, including an acquisition of Gevo® by means of a tender offer, a proxy contest and removal of our incumbent officers and directors, without the support of our board of directors. A summary of these provisions follows.

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### **Description of capital stock**

#### **Statutory Business Combination Provision**

We are subject to Section 203 of the DGCL, which, subject to certain exceptions, prohibits a Delaware corporation from engaging in any business combination with an interested stockholder for a period of three years following the time that such stockholder became an interested stockholder, unless:

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

With certain exceptions, an interested stockholder is a person or group who or which owns 15% or more of the corporation's outstanding voting stock (including any rights to acquire stock pursuant to an option, warrant, agreement, arrangement or understanding, or upon the exercise of conversion or exchange rights, and stock with respect to which the person has voting rights only), or is an affiliate or associate of the corporation and was the owner of 15% or more of such voting stock at any time within the previous three years.

In general, Section 203 defines a business combination to include:

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

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A Delaware corporation may opt out of this provision with an express provision in its original certificate of incorporation or an express provision in its amended and restated certificate of incorporation or bylaws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. However, Gevo® has not opted out of this provision. Section 203 could prohibit or delay mergers or other takeover or change-in-control attempts and, accordingly, may discourage attempts to acquire Gevo®.

### **Election and Removal of Directors**

Our amended and restated certificate of incorporation provides for our board of directors to be divided into three classes, with staggered three-year terms. Only one class of directors is elected at each annual

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### **Description of capital stock**

meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of common stock outstanding are able to elect all of our directors. Directors may be removed only with cause by the affirmative vote of the holders of at least a majority of the outstanding shares entitled to vote on such removal.

### **No Stockholder Action by Written Consent**

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that any action required or permitted to be taken by the holders of common stock at an annual or special meeting of stockholders must be effected at a duly called meeting and may not be taken or effected by written consent of the stockholders.

### **Stockholder Meetings**

Under our amended and restated certificate of incorporation and our amended and restated bylaws, only the board of directors, acting pursuant to a resolution adopted by a majority of the directors then in office, may call a special meeting of the stockholders, and any business conducted at any special meeting will be limited to the purpose or purposes specified in the notice for such special meeting.

### **Requirements for Advance Notification of Stockholder Nominations and Proposals**

In order for our stockholders to bring nominations or business before an annual meeting properly, they must comply with certain notice requirements as provided by our amended and restated bylaws. Typically, in order for such notices to be timely, they must be provided to us not earlier than the close of business on the 120th day prior to the one-year anniversary of the preceding year's annual meeting and not later than the close of business on the 90th day prior to the one-year anniversary of the preceding year's annual meeting. For such notices to be timely in the event the annual meeting is advanced more than 30 days prior to or delayed by more than 70 days after the one-year anniversary of the preceding year's annual meeting, notice must be provided to us not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of the 90th day prior to such annual meeting or the 10th day following the day on which public announcement of the date of such meeting is first made.

### **AMENDMENT OF CHARTER PROVISIONS**

The affirmative vote of the holders of at least 66-2/3% of the voting power of all of the then-outstanding shares of our voting stock, voting together as a single class, is required to, among other things, alter, amend or repeal certain provisions of our amended and restated certificate of incorporation, including those related to the classification of our board of directors, the amendment of our bylaws and certificate of incorporation, restrictions against stockholder actions by written consent, the designated parties entitled to call a special meeting of the stockholders and the indemnification of officers and directors.

Our amended and restated bylaws may only be amended (or new bylaws adopted) by the board of directors or the affirmative vote of the holders of at least 66-2/3% of the voting power of all of the then-outstanding shares of our voting stock.

### **TRANSFER AGENT AND REGISTRAR**

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company. Its address is 6201 15th Avenue, Brooklyn, New York 11219 and its telephone number is (800) 937-5449. The transfer agent for any series of preferred stock that we may offer under this prospectus will be named and described in the prospectus supplement for that series.



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## Description of debt securities

We may issue debt securities, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. While the terms we have summarized below will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. Unless the context requires otherwise, whenever we refer to the indentures, we also are referring to any supplemental indentures that specify the terms of a particular series of debt securities.

We will issue the senior debt securities under the senior indenture that we will enter into with the trustee named in the senior indenture. We will issue the subordinated debt securities under the subordinated indenture that we will enter into with the trustee named in the subordinated indenture. The indentures will be qualified under the Trust Indenture Act of 1939. We use the term *debenture trustee* to refer to either the trustee under the senior indenture or the trustee under the subordinated indenture, as applicable. We have filed forms of indentures as exhibits to the registration statement of which this prospectus is a part, and supplemental indentures and forms of debt securities containing the terms of the debt securities being offered will be filed as exhibits to the registration statement of which this prospectus is a part or will be incorporated by reference from reports that we file with the SEC.

The following summaries of material provisions of the senior debt securities, the subordinated debt securities and the indentures are subject to, and qualified in their entirety by reference to, all of the provisions of the indenture applicable to a particular series of debt securities. We urge you to read the applicable prospectus supplements and any related free writing prospectuses related to the debt securities that we may offer under this prospectus, as well as the complete indentures that contain the terms of the debt securities. Except as we may otherwise indicate, the terms of the senior indenture and the subordinated indenture are identical.

### **GENERAL**

We will describe in the applicable prospectus supplement the terms of the series of debt securities being offered, including:

- Ø the title;
  
- Ø the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding;
  
- Ø any limit on the amount that may be issued;
  
- Ø whether or not we will issue the series of debt securities in global form, the terms and who the depository will be;
  
- Ø the maturity date;
  
- Ø whether and under what circumstances, if any, we will pay additional amounts on any debt securities held by a person who is not a U.S. person for tax purposes, and whether we can redeem the debt securities if we have to pay such additional amounts;

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Ø the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;

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**Description of debt securities**

- Ø whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- Ø the terms of the subordination of any series of subordinated debt;
- Ø the place where payments will be payable;
- Ø restrictions on transfer, sale or other assignment, if any;
- Ø our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- Ø the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;
- Ø the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;
- Ø whether the indenture will restrict our ability and/or the ability of our subsidiaries to:
  - Ø incur additional indebtedness;
  - Ø issue additional securities;
  - Ø create liens;
  - Ø pay dividends and make distributions in respect of our capital stock and/or the capital stock of our subsidiaries;
  - Ø redeem capital stock;
  - Ø make investments or other restricted payments;

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- Ø sell, transfer or otherwise dispose of assets;
  
- Ø enter into sale-leaseback transactions;
  
- Ø engage in transactions with stockholders and affiliates;
  
- Ø issue or sell stock of our subsidiaries; or
  
- Ø effect a consolidation or merger;
  
- Ø whether the indenture will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;
  
- Ø information describing any book-entry features;
  
- Ø provisions for a sinking fund purchase or other analogous fund, if any;
  
- Ø the applicability of the provisions in the indenture on discharge;
  
- Ø whether the debt securities are to be offered at a price such that they will be deemed to be offered at an original issue discount as defined in paragraph (a) of Section 1273 of the Internal Revenue Code;
  
- Ø the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;
  
- Ø the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars;
  
- Ø any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any additional events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations; and

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### **Description of debt securities**

Ø any other terms which shall not be inconsistent with the indentures.

The notes may be issued as original issue discount securities. An original issue discount security is a note, including any zero-coupon note, which:

Ø is issued at a price lower than the amount payable upon its stated maturity; and

Ø provides that upon redemption or acceleration of the maturity, an amount less than the amount payable upon the stated maturity, shall become due and payable.

United States federal income tax consequences applicable to notes sold at an original issue discount will be described in the applicable prospectus supplement. In addition, United States federal income tax or other consequences applicable to any notes which are denominated in a currency or currency unit other than United States dollars may be described in the applicable prospectus supplement.

Under the indentures, we will have the ability, in addition to the ability to issue notes with terms different from those of notes previously issued, without the consent of the holders, to reopen a previous issue of a series of notes and issue additional notes of that series, unless the reopening was restricted when the series was created, in an aggregate principal amount determined by us.

### **CONVERSION OR EXCHANGE RIGHTS**

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

### **CONSOLIDATION, MERGER OR SALE**

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the indentures will not contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However, any successor to or acquirer of such assets must assume all of our obligations under the indentures or the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all of our property must make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

### **EVENTS OF DEFAULT UNDER THE INDENTURES**

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, the following are events of default under the indentures with respect to any series of debt securities that we may issue:

Ø if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended or deferred;

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if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable and the time for payment has not been extended or delayed;

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### **Description of debt securities**

Ø if we fail to observe or perform any other covenant contained in the debt securities or the indentures, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the debenture trustee or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series;

Ø if specified events of bankruptcy, insolvency or reorganization occur; and

Ø any other event of default described in the applicable prospectus supplement.

If an event of default with respect to debt securities of any series occurs and is continuing, other than an event of default specified in the last bullet point above, the debenture trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series, by notice to us in writing, and to the debenture trustee if notice is given by such holders, may declare the unpaid principal of, premium, if any, and accrued interest, if any, due and payable immediately. If an event of default specified in the last bullet point above occurs with respect to us, the principal amount of and accrued interest, if any, of each issue of debt securities then outstanding shall be due and payable without any notice or other action on the part of the debenture trustee or any holder.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the indenture. Any such waiver shall cure the default or event of default.

Subject to the terms of the applicable indenture, if an event of default under an indenture shall occur and be continuing, the debenture trustee will be under no obligation to exercise any of its rights or powers under such indenture at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debenture trustee reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debenture trustee, or exercising any trust or power conferred on the debenture trustee, with respect to the debt securities of that series, provided that:

Ø the direction so given by the holders is not in conflict with any law or the applicable indenture; and

Ø subject to its duties under the Trust Indenture Act of 1939, the debenture trustee need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under an indenture or to appoint a receiver or trustee, or to seek other remedies only if:

Ø the holder has given written notice to the debenture trustee of a continuing event of default with respect to that series;

Ø the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debenture trustee to institute the proceeding as trustee; and

Ø the debenture trustee does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 60 days after the notice, request and offer.



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**Description of debt securities**

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or accrued interest on, the debt securities.

We will periodically file statements with the debenture trustee regarding our compliance with specified covenants in the indentures.

**MODIFICATION OF INDENTURE; WAIVER**

We and the debenture trustee may change an indenture without the consent of any holders with respect to specific matters:

- Ø to fix any ambiguity, defect or inconsistency in the indenture;
  - Ø to comply with the provisions described above under Description of Debt Securities Consolidation, Merger or Sale;
  - Ø to comply with any requirements of the SEC in connection with the qualification of any indenture under the Trust Indenture Act of 1939;
  - Ø to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in such indenture;
  - Ø to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under Description of Debt Securities General to establish the form of any certifications required to be furnished pursuant to the terms of an indenture or any series of debt securities, or to add to the rights of the holders of any series of debt securities;
  - Ø to evidence and provide for the acceptance of appointment hereunder by a successor trustee;
  - Ø to provide for uncertificated debt securities in addition to or in place of certificated debt securities and to make all appropriate changes for such purpose;
  - Ø to add to our covenants such new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default; or
  - Ø to change anything that does not materially adversely affect the interests of any holder of debt securities of any series.
- In addition, under the indentures, the rights of holders of a series of debt securities may be changed by us and the debenture trustee with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the debenture trustee may make the following changes only with the consent of each holder of any outstanding debt securities affected:

- Ø extending the fixed maturity of the series of debt securities;
  
- Ø reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities;
  
- Ø reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver of the applicable indenture or notes or for waiver of compliance with certain provisions of the applicable indenture or for waiver of certain defaults;.

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**Description of debt securities**

- Ø changing any of our obligations to pay additional amounts;
- Ø reducing the amount of principal of an original issue discount security or any other note payable upon acceleration of the maturity thereof;
- Ø changing currency in which any note or any premium or interest is payable;
- Ø impairing the right to enforce any payment on or with respect to any note;
- Ø adversely changing the right to convert or exchange, including decreasing the conversion rate or increasing the conversion price of, such note, if applicable;
- Ø in the case of the subordinated indenture, modifying the subordination provisions in a manner adverse to the holders of the subordinated notes;
- Ø if the notes are secured, changing the terms and conditions pursuant to which the notes are secured in a manner adverse to the holders of the secured notes;
- Ø reducing the requirements contained in the applicable indenture for quorum or voting;
- Ø changing any of our obligations to maintain an office or agency in the places and for the purposes required by the indentures; or
- Ø modifying any of the above provisions set forth in this paragraph.

**DISCHARGE**

Each indenture provides that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

- Ø register the transfer or exchange of debt securities of the series;
- Ø replace stolen, lost or mutilated debt securities of the series;
- Ø maintain paying agencies;

Ø hold monies for payment in trust;

Ø recover excess money held by the debenture trustee;

Ø compensate and indemnify the debenture trustee; and

Ø appoint any successor trustee.

In order to exercise our rights to be discharged, we must deposit with the debenture trustee money or government obligations sufficient to pay all the principal of, the premium, if any, and interest on, the debt securities of the series on the dates payments are due.

#### **FORM, EXCHANGE AND TRANSFER**

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof. The indentures provide that we may issue debt securities of a series in temporary or permanent global form and as book-entry securities that will be deposited with, or on behalf of, The Depository Trust Company ( DTC ) or another depository named by us and identified in a prospectus supplement with respect to that series. See Legal Ownership of Securities for a further description of the terms relating to any book-entry securities.

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### **Description of debt securities**

At the option of the holder, subject to the terms of the indentures and the limitations applicable to global securities described in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the indentures and the limitations applicable to global securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

Ø issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or

Ø register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

### **INFORMATION CONCERNING THE DEBENTURE TRUSTEE**

The debenture trustee, other than during the occurrence and continuance of an event of default under an indenture, undertakes to perform only those duties as are specifically set forth in the applicable indenture. Upon an event of default under an indenture, the debenture trustee must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debenture trustee is under no obligation to exercise any of the powers given to it by the indentures at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

### **PAYMENT AND PAYING AGENTS**

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of, and any premium and interest on, the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. Unless we otherwise indicate in the applicable prospectus supplement,



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**Description of debt securities**

we will designate the corporate trust office of the debenture trustee in the City of New York as our sole paying agent for payments with respect to debt securities of each series. We will name in the applicable prospectus supplement any other paying agents that we initially designate for the debt securities of a particular series. We will maintain a paying agent in each place of payment for the debt securities of a particular series.

All money we pay to a paying agent or the debenture trustee for the payment of the principal of, or any premium or interest on, any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

**GOVERNING LAW**

The indentures and the debt securities will be governed by and construed in accordance with the laws of the State of New York, except to the extent that the Trust Indenture Act of 1939 is applicable.

**SUBORDINATION OF SUBORDINATED DEBT SECURITIES**

The subordinated debt securities will be unsecured and will be subordinate and junior in priority of payment to certain of our other indebtedness to the extent described in a prospectus supplement. The subordinated indenture does not limit the amount of subordinated debt securities that we may issue, nor does it limit us from issuing any other secured or unsecured debt.

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## Description of warrants

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of warrant agreement, including a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summaries of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to the particular series of warrants that we may offer under this prospectus. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we may offer under this prospectus, as well as any related free writing prospectuses, and the complete warrant agreements and warrant certificates that contain the terms of the warrants.

### **GENERAL**

We will describe in the applicable prospectus supplement the terms of the series of warrants being offered, including:

- ∅ the offering price and aggregate number of warrants offered;
- ∅ the currency for which the warrants may be purchased;
- ∅ if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- ∅ if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- ∅ in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at which, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- ∅ in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- ∅ the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreements and the warrants;

- Ø the terms of any rights to redeem or call the warrants;
- Ø any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- Ø the dates on which the right to exercise the warrants will commence and expire;
- Ø the manner in which the warrant agreements and warrants may be modified;
- Ø a discussion of any material or special U.S. federal income tax consequences of holding or exercising the warrants;

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### **Description of warrants**

Ø the terms of the securities issuable upon exercise of the warrants; and

Ø any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

Ø in the case of warrants to purchase debt securities, the right to receive payments of principal of, or premium, if any, or interest on the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or

Ø in the case of warrants to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise voting rights, if any.

### **EXERCISE OF WARRANTS**

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the specified time on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent upon exercise.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

### **GOVERNING LAW**

Unless we provide otherwise in the applicable prospectus supplement, the warrants and warrant agreements will be governed by and construed in accordance with the laws of the State of New York.

### **ENFORCEABILITY OF RIGHTS BY HOLDERS OF WARRANTS**

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise and receive the securities purchasable upon exercise of, its warrants.



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## **Description of units**

We may issue, in one more series, units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in any combination. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we may offer under this prospectus, as well as any related free writing prospectuses and the complete unit agreement and any supplemental agreements that contain the terms of the units.

### **GENERAL**

Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units being offered, including:

Ø the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;

Ø any provisions of the governing unit agreement that differ from those described below; and

Ø any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under Description of Capital Stock, Description of Debt Securities and Description of Warrants will apply to each unit and to any common stock, preferred stock, debt security or warrant included in each unit, respectively.

### **ISSUANCE IN SERIES**

We may issue units in such amounts and in such numerous distinct series as we determine.

### **ENFORCEABILITY OF RIGHTS BY HOLDERS OF UNITS**

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in



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**Description of units**

case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as a holder under any security included in the unit.

**Title**

We, and any unit agent and any of their agents, may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary. See [Legal Ownership of Securities](#) below.

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## Legal ownership of securities

We can issue securities in registered form or in the form of one or more global securities. We describe global securities in greater detail below. We refer to those persons who have securities registered in their own names on the books that we or any applicable trustee, depositary or warrant agent maintain for this purpose as the holders of those securities. These persons are the legal holders of the securities. We refer to those persons who, indirectly through others, own beneficial interests in securities that are not registered in their own names, as indirect holders of those securities. As we discuss below, indirect holders are not legal holders, and investors in securities issued in book-entry form or in street name will be indirect holders.

### **BOOK-ENTRY HOLDERS**

We may issue securities in book-entry form only, as we will specify in the applicable prospectus supplement. This means securities may be represented by one or more global securities registered in the name of a financial institution that holds them as depositary on behalf of other financial institutions that participate in the depositary's book-entry system. These participating institutions, which are referred to as participants, in turn, hold beneficial interests in the securities on behalf of themselves or their customers.

Only the person in whose name a security is registered is recognized as the holder of that security. Securities issued in global form will be registered in the name of the depositary or its participants. Consequently, for securities issued in global form, we will recognize only the depositary as the holder of the securities, and we will make all payments on the securities to the depositary. The depositary passes along the payments it receives to its participants, which in turn pass the payments along to their customers who are the beneficial owners. The depositary and its participants do so under agreements they have made with one another or with their customers; they are not obligated to do so under the terms of the securities.

As a result, investors in a book-entry security will not own securities directly. Instead, they will own beneficial interests in a global security, through a bank, broker or other financial institution that participates in the depositary's book-entry system or holds an interest through a participant. As long as the securities are issued in global form, investors will be indirect holders, and not holders, of the securities.

### **STREET NAME HOLDERS**

We may terminate a global security or issue securities in non-global form. In these cases, investors may choose to hold their securities in their own names or in street name. Securities held by an investor in street name would be registered in the name of a bank, broker or other financial institution that the investor chooses, and the investor would hold only a beneficial interest in those securities through an account he or she maintains at that institution.

For securities held in street name, we will recognize only the intermediary banks, brokers and other financial institutions in whose names the securities are registered as the holders of those securities, and we will make all payments on those securities to them. These institutions pass along the payments they receive to their customers who are the beneficial owners, but only because they agree to do so in their customer agreements or because they are legally required to do so. Investors who hold securities in street name will be indirect holders, not holders, of those securities.

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### **Legal ownership of securities**

#### **LEGAL HOLDERS**

Our obligations, as well as the obligations of any applicable trustee and of any third parties employed by us or a trustee, run only to the legal holders of the securities. We do not have obligations to investors who hold beneficial interests in global securities, in street name or by any other indirect means. This will be the case whether an investor chooses to be an indirect holder of a security or has no choice because we are issuing the securities only in global form.

For example, once we make a payment or give a notice to the holder, we have no further responsibility for the payment or notice even if that holder is required, under agreements with depositary participants or customers or by law, to pass it along to the indirect holders but does not do so. Similarly, we may want to obtain the approval of the holders to amend an indenture, to relieve us of the consequences of a default or of our obligation to comply with a particular provision of the indenture or for other purposes. In such an event, we would seek approval only from the holders, and not the indirect holders, of the securities. Whether and how the holders contact the indirect holders is up to the holders.

#### **SPECIAL CONSIDERATIONS FOR INDIRECT HOLDERS**

If you hold securities through a bank, broker or other financial institution, either in book-entry form or in street name, you should check with your own institution to find out:

- ∅ how it handles securities payments and notices;
- ∅ whether it imposes fees or charges;
- ∅ how it would handle a request for the holders' consent, if ever required;
- ∅ whether and how you can instruct it to send you securities registered in your own name so you can be a holder, if that is permitted in the future;
- ∅ how it would exercise rights under the securities if there were a default or other event triggering the need for holders to act to protect their interests; and
- ∅ if the securities are in book-entry form, how the depositary's rules and procedures will affect these matters.

#### **GLOBAL SECURITIES**

A global security is a security that represents one or any other number of individual securities held by a depositary. Generally, all securities represented by the same global securities will have the same terms.

Each security issued in book-entry form will be represented by a global security that we deposit with and register in the name of a financial institution or its nominee that we select. The financial institution that we select for this purpose is called the depositary. Unless we specify otherwise in the applicable prospectus supplement, DTC will be the depositary for all securities issued in book-entry form.

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A global security may not be transferred to or registered in the name of anyone other than the depositary, its nominee or a successor depositary, unless special termination situations arise. We describe those situations below under Special Situations When a Global Security Will Be Terminated. As a result of these arrangements, the depositary, or its nominee, will be the sole registered owner and holder of all securities represented by a global security, and investors will be permitted to own only beneficial interests in a global security. Beneficial interests must be held by means of an account with a broker,

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### **Legal ownership of securities**

bank or other financial institution that in turn has an account with the depository or with another institution that does. Thus, an investor whose security is represented by a global security will not be a holder of the security, but only an indirect holder of a beneficial interest in the global security.

If the prospectus supplement for a particular security indicates that the security will be issued in global form only, then the security will be represented by a global security at all times unless and until the global security is terminated. If termination occurs, we may issue the securities through another book-entry clearing system or decide that the securities may no longer be held through any book-entry clearing system.

### **SPECIAL CONSIDERATIONS FOR GLOBAL SECURITIES**

The rights of an indirect holder relating to a global security will be governed by the account rules of the investor's financial institution and of the depository, as well as general laws relating to securities transfers. We do not recognize an indirect holder as a holder of securities and instead deal only with the depository that holds the global security.

If securities are issued only in the form of a global security, an investor should be aware of the following:

- Ø an investor cannot cause the securities to be registered in his or her name, and cannot obtain non-global certificates for his or her interest in the securities, except in the special situations we describe below;
- Ø an investor will be an indirect holder and must look to his or her own bank or broker for payments on the securities and protection of his or her legal rights relating to the securities, as we describe above;
- Ø an investor may not be able to sell interests in the securities to some insurance companies and to other institutions that are required by law to own their securities in non-book-entry form;
- Ø an investor may not be able to pledge his or her interest in a global security in circumstances where certificates representing the securities must be delivered to the lender or other beneficiary of the pledge in order for the pledge to be effective;
- Ø the depository's policies, which may change from time to time, will govern payments, transfers, exchanges and other matters relating to an investor's interest in a global security;
- Ø we and any applicable trustee have no responsibility for any aspect of the depository's actions or for its records of ownership interests in a global security, nor do we or any applicable trustee supervise the depository in any way;
- Ø the depository may, and we understand that DTC will, require that those who purchase and sell interests in a global security within its book-entry system use immediately available funds, and your broker or bank may require you to do so as well; and

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financial institutions that participate in the depositary's book-entry system, and through which an investor holds its interest in a global security, may also have their own policies affecting payments, notices and other matters relating to the securities. There may be more than one financial intermediary in the chain of ownership for an investor. We do not monitor and are not responsible for the actions of any of those intermediaries.

**SPECIAL SITUATIONS WHEN A GLOBAL SECURITY WILL BE TERMINATED**

In a few special situations described below, the global security will terminate and interests in it will be exchanged for physical certificates representing those interests. After that exchange, the choice of

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**Legal ownership of securities**

whether to hold securities directly or in street name will be up to the investor. Investors must consult their own banks or brokers to find out how to have their interests in securities transferred to their own name, so that they will be direct holders. We have described the rights of holders and street name investors above.

Unless we provide otherwise in the applicable prospectus supplement, the global security will terminate when the following special situations occur:

- Ø if the depository notifies us that it is unwilling, unable or no longer qualified to continue as depository for that global security and we do not appoint another institution to act as depository within 90 days;
  
  - Ø if we notify any applicable trustee that we wish to terminate that global security; or
  
  - Ø if an event of default has occurred with regard to securities represented by that global security and has not been cured or waived.
- The prospectus supplement may also list additional situations for terminating a global security that would apply only to the particular series of securities covered by the applicable prospectus supplement. When a global security terminates, the depository, and not we or any applicable trustee, is responsible for deciding the names of the institutions that will be the initial direct holders.

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## Plan of distribution

We may sell the securities from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

- ∅ at a fixed price or prices, which may be changed;
- ∅ at market prices prevailing at the time of sale;
- ∅ at prices related to such prevailing market prices; or
- ∅ at negotiated prices.

A prospectus supplement or supplements will describe the terms of the offering of the securities, including:

- ∅ the name or names of the underwriters, if any;
- ∅ the purchase price of the securities and the proceeds we will receive from the sale;
- ∅ any over-allotment options under which underwriters may purchase additional securities from us;
- ∅ any agency fees or underwriting discounts and other items constituting agents or underwriters compensation;
- ∅ any public offering price;
- ∅ any discounts or concessions allowed or reallocated or paid to dealers; and

∅ any securities exchange or market on which the securities may be listed.

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

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to

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purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or reallocated or paid to dealers may change from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to

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### **Plan of distribution**

delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters that are qualified market makers on the NASDAQ Global Market may engage in passive market making transactions in the common stock on the NASDAQ Global Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of the common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

In compliance with guidelines of the Financial Industry Regulatory Authority, or FINRA, the maximum consideration or discount to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

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## Legal matters

The validity of the securities being offered by this prospectus will be passed upon by Paul Hastings LLP, San Diego, California.

## Experts

The consolidated financial statements incorporated in this Prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2011, and the effectiveness of Gevo, Inc.'s internal control over financial reporting have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their reports (which reports (1) express an unqualified opinion on the consolidated financial statements and includes explanatory paragraphs referring to Gevo, Inc.'s status as a development stage enterprise and the change in the method of accounting for preferred stock warrants and (2) expresses an unqualified opinion on the effectiveness of internal control over financial reporting), which are incorporated herein by reference. Such consolidated financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

## Material changes

None.

## Where you can find additional information

### AVAILABLE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference room. The SEC maintains an Internet website at <http://www.sec.gov> that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Gevo, Inc. You may also access our reports and proxy statements free of charge at our Internet website, <http://www.gevo.com>.

This prospectus is part of a registration statement that we have filed with the SEC relating to the securities to be offered. This prospectus does not contain all of the information we have included in the registration statement and the accompanying exhibits and schedules in accordance with the rules and regulations of the SEC, and we refer you to the omitted information. The statements this prospectus makes pertaining to the content of any contract, agreement or other document that is an exhibit to the registration statement necessarily are summaries of their material provisions and do not describe all exceptions and qualifications contained in those contracts, agreements or documents. You should read those contracts, agreements or documents for information that may be important to you. The registration statement, exhibits and schedules are available at the SEC's Public Reference Room or through its Internet website.

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**INCORPORATION BY REFERENCE**

The rules of the SEC allow us to incorporate by reference in this prospectus the information in other documents that we file with it, which means that we can disclose important information to you by referring you to those documents that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus. We hereby incorporate by reference the following information or documents into this prospectus:

- ∅ our Annual Report on Form 10-K for the fiscal year ended December 31, 2011 filed with the SEC on February 28, 2012;
- ∅ our Amendment No. 1 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2011 filed with the SEC on March 14, 2012;
- ∅ our Amendment No. 2 to the Annual Report on Form 10-K for the fiscal year ended December 31, 2011 filed with the SEC on April 10, 2012;
- ∅ our Current Reports on Form 8-K filed with the SEC on February 28, 2012, March 14, 2012, March 15, 2012 and April 9, 2012; and
- ∅ the description of our common stock contained in our Registration Statement on Form S-1 (File No. 333-168792), filed with the SEC on August 12, 2010, including any subsequent amendment or report filed for the purpose of amending such description.

Any information in any of the foregoing documents will automatically be deemed to be modified or superseded to the extent that information in this prospectus or in a later filed document that is incorporated or deemed to be incorporated herein by reference modifies or replaces such information.

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

Upon written or oral request, we will provide to you, without charge, a copy of any or all of the documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests should be directed to: Gevo, Inc., Attention: Investor Relations, 345 Inverness Drive South, Building C, Suite 310, Englewood, Colorado, 80112, telephone (303) 858-8358.



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