ROCKWELL MEDICAL, INC.
Form 10-K
March 07, 2014

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2013

OR

o **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to
Commission file number 000-23661

ROCKWELL MEDICAL, INC.

(Exact name of registrant as specified in its charter)

Michigan	**38-3317208**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
30142 Wixom Road Wixom, Michigan	**48393**
(Address of principal executive offices)	(Zip Code)

(248) 960-9009
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class:	**Name of each exchange on which registered:**
Common Stock, no par value	Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the Act:

(None)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No ý

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No ý

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 ý No o

Indicate by check mark 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 (§232.405 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 ý No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) 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. o

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No ý

The aggregate market value of the registrant's voting and non-voting common equity held by non-affiliates of the registrant on June 30, 2013 (computed by reference to the closing sales price of the registrant's Common Stock as reported on the NASDAQ Global Market on such date) was $135,645,000. For purposes of this computation, shares of common stock held by our executive officers, directors and common shareholders with 10% or more of the outstanding shares of Common Stock were excluded. Such determination should not be deemed an admission that such officers, directors and beneficial owners are, in fact, affiliates.

Number of shares outstanding of the registrant's Common Stock, no par value, as of February 28, 2014: 40,748,161 shares.

Documents Incorporated by Reference

Portions of the Registrant's definitive Proxy Statement pertaining to the 2014 Annual Meeting of Shareholders (the "Proxy Statement") to be filed pursuant to Regulation 14A are herein incorporated by reference in Part III of this Annual Report on Form 10-K.

PART I

References to "Rockwell", the "Company," "we," "us" and "our" are to Rockwell Medical, Inc. and its subsidiary unless otherwise specified or the context otherwise requires.

Forward Looking Statements

We make forward-looking statements in this report and may make such statements in future filings with the Securities and Exchange Commission, or SEC. We may also make forward-looking statements in our press releases or other public or shareholder communications. Our forward-looking statements are subject to risks and uncertainties and include information about our expectations and possible or assumed future results of our operations. When we use words such as "may," might," "will," "should," "believe," "expect," "anticipate," "estimate," "continue", "predict", "forecast", "projected," "intend" or similar expressions, or make statements regarding our intent, belief, or current expectations, we are making forward-looking statements. Our forward looking statements also include, without limitation, statements about our competitors, statements regarding the timing and costs of obtaining FDA approval of our new products, statements regarding our new products such as Triferic® and Calcitriol, and statements regarding our anticipated future financial condition, operating results, cash flows and business and financing plans.

We claim the protection of the safe harbor for forward-looking statements contained in the Private Securities Litigation Reform Act of 1995 for all of our forward-looking statements. While we believe that our forward-looking statements are reasonable, you should not place undue reliance on any such forward-looking statements, which are based on information available to us on the date of this report or, if made elsewhere, as of the date made. Because these forward-looking statements are based on estimates and assumptions that are subject to significant business, economic and competitive uncertainties, many of which are beyond our control or are subject to change, actual results could be materially different. Factors that might cause such a difference include, without limitation, the risks and uncertainties discussed in this report, including without limitation in "Item 1A Risk Factors," and from time to time in our other reports filed with the SEC. Other factors not currently anticipated may also materially and adversely affect our results of operations, cash flows and financial position. We do not undertake, and expressly disclaim, any obligation to update or alter any statements whether as a result of new information, future events or otherwise except as required by law.

Item 1. Business.

General

Rockwell Medical, Inc., incorporated in the state of Michigan in 1996, is a fully-integrated biopharmaceutical company targeting end-stage renal disease (ESRD) and chronic kidney disease (CKD) with innovative products and services for the treatment of iron deficiency, secondary hyperparathyroidism and hemodialysis (also referred to as "dialysis").

Rockwell's lead investigational drug, Triferic®, also known as Soluble Ferric Pyrophosphate or SFP, delivers iron to the bone marrow in a non-invasive, physiologic manner to hemodialysis patients via dialysate during their regular dialysis treatment. We are preparing to submit a New Drug Application ("NDA") to the U.S. Food and Drug Administration ("FDA") in the first quarter of 2014 seeking marketing approval of Triferic®. We also plan to seek foreign market approval for this product and/or license the technology to a company who will seek market approval in the licensed markets

The majority of ESRD patients receive iron on a routine basis. We believe Triferic® will substantially improve iron therapy for these patients. The Company successfully completed the two pivotal studies, CRUISE-1 and CRUISE-2, in Triferic®'s Phase 3 clinical program during 2013. Both studies met their primary efficacy endpoint and achieved statistical significance. The Company also

completed an extensive longer term safety study in early 2014 which showed that Triferic® has an exceptionally good safety profile, with over 100,000 administrations in its clinical program.

In addition, in early 2013, the Company completed its PRIME study which demonstrated that Triferic® could achieve a significant reduction in the need for erythropoiesis stimulating agents ("ESA") in CKD-HD patients who receive Triferic® during dialysis. ESA drugs are the most expensive drugs used in dialysis. We cannot, however, give any assurance that Triferic® will be approved by the FDA or, if approved, that it will be successfully marketed. See "Item 1A Risk Factors."

Rockwell is also preparing to launch an FDA approved generic drug called Calcitriol. Calcitriol is active vitamin D injection and indicated for the treatment of secondary hyperparathyroidism in dialysis patients. The majority of ESRD patients receive vitamin D on a routine basis. We are in the process of obtaining regulatory approval for a change in manufacturing location and anticipate obtaining approval to begin marketing Calcitriol in the first half of 2014. However, due to FDA's procedures for generic drugs and backlog of requests, it is uncertain as to when such approval will be granted and there is no assurance that such approval will be granted in the time frame we estimate.

Rockwell is also an established manufacturer and leader in delivering high-quality hemodialysis concentrates/dialysates to dialysis providers and distributors in the U.S. and abroad. These products are used in the hemodialysis process to maintain human life by removing toxins and replacing critical nutrients in the patient's bloodstream. Rockwell's has three manufacturing and distribution facilities in the United States and its operating infrastructure is a ready-made sales and distribution channel that will be able to provide seamless integration of Calcitriol and Triferic® into the commercial market upon FDA approval.

Our Business Strategy

We intend to become a leading biopharmaceutical company focused primarily on renal indications, while leveraging our operating business infrastructure to market and sell approved drugs commercially. The following are the key elements of our business strategy:

Obtain Regulatory Approval of our Lead Drug Candidate Triferic® for the Treatment of Iron Deficiency in Hemodialysis Patients.

We are seeking and intend to obtain FDA regulatory approval to market Triferic® commercially. Based on reports from manufacturers of intravenous ("IV") iron products and industry estimates, the market size in the United States for IV iron therapy for ESRD patients is approximately $600 million per year. We sell to and service a significant number of dialysis providers in the United States and intend to market Triferic® to those dialysis providers.

Launch Calcitriol (Active Vitamin D) Injection for the Treatment of Secondary Hyperparathyroidism in Dialysis Patients.

We expect to obtain manufacturing approval from the FDA in the first half 2014 for our FDA approved generic drug Calcitriol and begin marketing Calcitriol thereafter. Based on manufacturers' reports and industry estimates, we believe the market size in the United States for vitamin D therapy for ESRD patients is greater than $300 million per year. We intend to market Calcitriol to our existing customer base that we service via our concentrate operating business, which currently serves approximately 25% of the U.S. concentrate dialysis market.

Obtain License/Marketing Partners to Leverage Our Products Globally for Commercialization.

We seek commercial collaborations to license and develop our products and to realize financial benefits on an international basis. We intend to leverage the development, regulatory and marketing

presence and expertise of potential business partners to accelerate the development of our products throughout the world.

Continue Development of our Commercial Concentrate Business and Market Position and Leverage that Infrastructure to Sell our Renal Drugs Once Approved by the FDA.

We intend to continue to increase our market presence in our concentrate/dialysate products business in the U.S. and internationally by continuing to develop and offer innovative products that improve patient outcomes and lower provider costs. We estimate the global market for IV iron therapy is in excess of $1 billion per year. We intend to use this operating infrastructure to sell our renal drugs into the same market, with minimal additional expense.

Leverage Our Triferic® Technology to Develop Other Drugs for Other Indications in Iron Therapy Management.

We intend to pursue clinical development and or business partnerships to leverage Triferic® iron delivery technology to address other indications for treating anemia in the U.S. and globally.

Identify Novel Drugs to Address Unmet Needs and Market Opportunities.

We will pursue opportunities to secure other drugs inside and outside the renal market that we believe hold great potential to address unmet needs, and that we believe will enable us to expand our reach further into drug development.

Acquire Rights to and Commercially Implement Complementary Drug Candidates and Technologies.

We intend to continue to selectively pursue and acquire rights to drug products in various stages of development, or FDA approved drugs, with the intention to commercialize and/or realize their business potential.

Our Markets

The Hemodialysis Market

The great majority of hemodialysis patients receive dialysis treatment three times per week, or 156 times per year. Most have their dialysis treatment performed at a free-standing clinic; these are called "chronic" patients. Some have their treatment performed at hospitals; these are called "acute" patients. A small percentage receive their treatment at home; these are called "home" patients. In each setting, a dialysis machine dilutes concentrated solution, such as our concentrate products, with purified water. The resulting solution is called dialysate. Dialysate is pumped through an artificial kidney (or dialyzer) while the patient's blood is pumped through a semi-permeable membrane inside the dialyzer, in the opposite direction the dialysate is flowing. The dialysate infuses calcium and bicarbonate into the patient's blood while removing water and waste. Dialysate generally contains dextrose, sodium chloride, calcium, potassium, magnesium, sodium bicarbonate and acetic acid, or citric acid. The patient's physician chooses the proper concentrations required for each patient based on each particular patient's needs.

In addition to using reusable concentrate products, a dialysis provider also uses other ancillary products such as blood tubing, fistula needles, specialized component kits, dressings, cleaning agents, filtration salts and other supplies, many of which we sell.

Dialysis Industry Trends

Hemodialysis is the primary treatment modality employed in the United States with over 90% of all dialysis patients receiving hemodialysis. The Company does not compete in the peritoneal or home

dialysis segments. Hemodialysis treatments are generally performed in independent clinics or hospitals with the majority of dialysis services performed by national and regional for profit dialysis chains. Based on data published by the U.S. Renal Data Systems ("USRDS") we estimate that there are approximately 6,000 Medicare-certified treatment clinics in the United States. The two largest national for-profit dialysis chains service approximately 70% of the domestic hemodialysis market. According to the most recent industry statistics published by USRDS, there were approximately 430,000 dialysis patients in the United States in 2011. The U.S. patient population has grown steadily over the past several decades, and is expected to grow approximately 4-6% annually over the next several years.

Based on industry reports, the global ESRD population receiving some form of dialysis treatment is estimated to be over 2.5 million patients. Incidence rates vary by country with the overall global patient population growing approximately 6% annually. Today, the three largest dialysis markets are the United States, the European Union and Japan, which together represent approximately half of the total global treatments based on industry estimates. The Asia-Pacific market is projected to experience rapid growth in the incidence of kidney disease over the decade ahead.

Products (Operating Business)

We manufacture, sell, deliver and distribute hemodialysis concentrates, along with a full line of ancillary products, to customers in the U.S. and abroad. Dialysate concentrates account for over 93% of our revenue and consist of two products known in the industry as "acid" and "bicarbonate" and are packaged as liquid or powder. All of our products are manufactured according to Association for the Advancement of Medical Instrumentation and current good manufacturing practices ("cGMP") guidelines. Our concentrate products are used in conjunction and are diluted with clean water on-site at the clinic in the dialysis machine, creating dialysate, which works to clean the patient's blood.

CitraPure® Citric-Acid Concentrate

Our CitraPure® concentrate is 100% acetate-free, in contrast to the acetate-based products most widely used for many years. Acetate promotes inflammation so its removal is beneficial to the patient. Citrate has anticoagulant properties and has been shown in clinical studies to have the ability to reduce the need for heparin during dialysis treatment (CitraPure® however is not indicated for heparin sparing). CitraPure® is packaged as a liquid and as a dry powder acid concentrate, for use with our Dry Acid Mixing System, containing citric acid, sodium chloride, dextrose and electrolyte additives such as magnesium, potassium, and calcium. We supply dry acid in 25 gallon cases and we supply liquid acid concentrate in both 55 gallon drums and in cases containing four-one gallon containers.

Dri-Sate® Dry Acid

Dry powder acid concentrate for use with our Dry Acid Mixing System, containing acetic acid, sodium chloride, dextrose and electrolyte additives such as magnesium, potassium, and calcium. We supply dry acid in 25 gallon cases.

Renal Pure® Liquid Acid Concentrate

Liquid acid concentrate containing acetic acid, sodium chloride, dextrose and electrolyte additives such as magnesium, potassium, and calcium. We supply liquid acid concentrate in both 55 gallon drums and in cases containing four-one gallon containers.

Dry Acid Concentrate Mixing System

Our Dry Acid Concentrate Mixing System is designed for our CitraPure® and Dri-Sate® Dry Acid product and allows a clinic to mix its acid concentrate on-site. The clinic technician, using a specially designed mixer, adds pre-measured packets of the necessary ingredients to purified water (AMII

standard). Clinics using Dry Acid Concentrate realize numerous advantages, including lower cost per treatment, reduced storage space requirements, reduced number of deliveries and more flexibility in scheduling deliveries, while enabling the Company to reduce distribution and warehousing costs.

RenalPure® Powder Bicarbonate Concentrate

RenalPure® bicarbonate sold in powder form is used mainly in chronic settings. Each clinic mixes bicarbonate on-site as required.

SteriLyte® Liquid Bicarbonate Concentrate

SteriLyte® bicarbonate is sold in liquid form and is used mainly in acute care settings.

Ancillary Products

We offer a wide range of ancillary products including blood tubing, fistula needles, specialized custom kits, dressings, cleaning agents, filtration salts and other supplies used by hemodialysis providers.

Drug Products

We are seeking FDA regulatory approval to market Triferic®, our investigational iron-delivery drug. We plan to file our NDA with the FDA in the first quarter of 2014.

We have filed an application for manufacturing approval from the FDA and expect to receive approval in the first half of 2014 for our FDA approved generic drug Calcitriol. We intend to begin marketing Calcitriol commercially upon receiving FDA approval.

Triferic® (Soluble Ferric Pyrophosphate); Investigational Drug

We have licensed the exclusive right to manufacture and sell Triferic®. If approved by the FDA, we believe Triferic® will substantially improve iron therapy treatment for dialysis patients. The treatment for iron deficiency anemia is pervasive in the CKD-HD patient population.

Triferic® is a unique iron compound that is delivered to the hemodialysis patient via dialysate, replacing the 5-7mg of iron that is lost during a dialysis treatment. Triferic® is introduced into the sodium bicarbonate concentrate that subsequently is mixed into dialysate. Once in the dialysate, Triferic® crosses the dialyzer membrane and enters the bloodstream where it immediately binds to apo-transferrin and is taken to the bone marrow. Triferic® mimics the way dietary iron is metabolized in the human body. In completed clinical trials to date with over 100,000 administrations, Triferic® has demonstrated that it can safely deliver iron and maintain hemoglobin levels, while decreasing ESA use without increasing iron stores.

To address iron deficiency, patients receive intravenous iron and ESA. ESA is an artificial hormone that acts in the bone marrow, together with iron, to increase the production of red blood cells, which carry oxygen throughout the body to nourish tissues and sustain life. Hemoglobin, an important constituent of red blood cells, is composed largely of iron and protein.

Current iron therapy for CKD-HD patients is provided mainly with IV iron compounds, which are encased by a carbohydrate shell to prevent free-iron from circulating in the bloodstream. Due to the carbohydrate shell, IV iron is taken up by the reticuloendothelial system and deposited primarily in the liver, rather than directly into blood plasma where it would be carried to the bone marrow. An increase in inflammation during dosing causes a peptide called hepcidin to mobilize and block the IV iron from effectively leaving the liver, which can reduce the effectiveness of ESA treatments. The carbohydrate moiety in IV iron compounds is also believed to be responsible for anaphylactic reactions when they occur.

Triferic® is distinctly different from IV iron compounds. Triferic® enters the bloodstream through dialysate and immediately binds to apo-transferrin (the body's natural binding site for iron) and is then carried directly to the bone marrow for the formation of new red blood cells, mimicking the way a healthy human body processes iron when received through food. Clinical data has shown that this more direct method of iron delivery is effective at maintaining a steady state of iron balance and achieves superior therapeutic response from ESA treatments, thereby lowering the need for ESA. Triferic® is an iron salt and contains no carbohydrate, and as a result has demonstrated an excellent safety profile in its recently completed Phase 3 clinical program and has not been attributed to any anaphylactic episodes in over 100,000 administrations.

ESA is administered intravenously during dialysis treatments to help maintain hemoglobin levels. Iron supplementation is required to ensure good therapeutic response from ESA treatments. Most dialysis patients receive ESA therapy coupled with iron therapy in order to maintain hemoglobin levels and to achieve the full benefit of ESA treatments. ESAs are very expensive drugs and are known to have serious risks associated with their dosing to dialysis patients.

Triferic®, in place of IV iron, has shown it can lower the drug administration cost to dialysis providers. Along with the elimination of the needle and syringe normally used for IV iron administration, and the resulting substantial nursing time gained to deliver quality patient care, Triferic® clinical data has shown that it can greatly reduce ESA use.

During 2013, Rockwell successfully completed its two pivotal Phase 3 clinical trials, called CRUISE-1 and CRUISE-2, for Triferic®. The CRUISE studies were identical single-blind, placebo controlled, parallel group, multi-center studies comparing Triferic® delivered via hemodialysate concentrate to placebo with standard hemodialysate concentrate with 600 subjects split evenly between the two studies and treatment arms. Both of the CRUISE studies successfully met their primary endpoint, demonstrating a statistically significant mean change in hemoglobin from baseline to End-of-Treatment. Triferic® also met key secondary endpoints including maintenance of hemoglobin, maintenance of reticulocyte hemoglobin and increase in serum iron pre-to-post treatment without an increase in ferritin.

A third Phase 3 trial, called the PRIME study demonstrated that Triferic® significantly reduces the need for ESA during dialysis. The PRIME study was a nine-month, prospective, randomized, placebo-controlled, double-blinded, multi-center study in the United States that randomized patients equally to dialysate containing Triferic®-iron *versus* conventional dialysate. A total of 103 patients received blinded study drug (52 Triferic®· 51 Placebo). The PRIME study data showed a statistically significant 35% reduction in ESA usage compared to the control arm. The PRIME data demonstrated that Triferic® was able to maintain hemoglobin levels in the target range over the nine month study duration while the magnitude of ESA sparing, compared to the control arm, met statistical significance. In addition, for patients that are resistant to ESA administration, referred to as hypo-responsive, these patients realized an average reduction in ESA usage of 74.4%. Hypo-responsive patients are generally estimated to represent approximately 20% of the dialysis patient population. Over $2.7 billion was spent on Amgen's ESA drugs in 2013 in the United States according to Amgen. We estimate that approximately $2.2 billion of Amgen's ESA sales were to the hemodialysis market.

In January 2014, we completed our long term safety study for Triferic® which was a prospective, randomized, double-blinded, placebo-controlled, crossover, multicenter, multinational, Phase 3 study with an enrollment of 718 CKD-HD patients in the US and Canada. This large-scale long term safety study coupled with the successful Phase 3 CRUISE studies, in which together there were over 100,000 Triferic® administrations, did not identify an acute safety signal or anaphylactic reaction, which are possible side effects of IV iron administration.

We intend to file an NDA and to seek FDA approval to market Triferic®. We intend to use our current sales and marketing infrastructure to sell and market Triferic® and other drugs to dialysis

providers in the U.S. market, once FDA approved. We intend to license the rights to Triferic® for commercial development in markets outside of the United States, such as Europe, Asia and Latin America.

Calcitriol (Active Vitamin D) Injection; FDA Approved Generic Drug

Calcitriol is a generic active vitamin D and is indicated for the treatment of secondary hyperparathyroidism in dialysis patients. The majority of ESRD patients receive vitamin D on a routine basis using one of two branded drugs. Calcitriol is the only generic vitamin D and clinical data shows it to be clinically equivalent in safety and efficacy to the two branded drugs. We believe the lower cost of Calcitriol will entice dialysis providers to purchase it over current vitamin D options. We are in the process of obtaining regulatory approval for a change in manufacturing location and anticipate obtaining approval to begin marketing Calcitriol during 2014.

Distribution and Delivery Operations

The majority of our domestic products are delivered through our subsidiary, Rockwell Transportation, Inc., which operates a fleet of trucks used to deliver products to our customers. We perform delivery services for customers that are generally not available from common carriers or our competitors, such as stock rotation, non-loading-dock delivery and drum pump-off service. As a result, we believe we offer a higher level of service to our customers.

Our Dry Acid Concentrate products require less storage space not only for our customers but for our warehousing as well. We are able to more effectively utilize warehouse and trailer space, as well transportation equipment, in our distribution process, resulting in a distribution savings.

Sales and Marketing

There are nine large dialysis providers that treat approximately 83% of the hemodialysis patient population. Due to the high level of industry concentration, we sell our products direct to domestic hemodialysis providers using a small number of salespeople. Our Chief Executive Officer leads and directs our sales effort, and handles our major accounts. Our products are sold to international customers through independent sales agents, distributors and direct.

We market and advertise through trade publications, journals, product literature, the internet and industry trade conferences. We target our sales and marketing efforts to upper management of dialysis companies, providers, nephrologists, clinic administrators, nurses, medical directors and purchasing personnel.

Competition

Dialysis Concentrate Solutions and Dialysis Products Market Competition

In the United States, we compete against Fresenius Medical Care NA, a vertically integrated manufacturer and marketer of dialysis devices, drugs and supplies and dialysis clinic operator, which has substantially greater financial, technical, manufacturing, marketing, research and development and management resources than the Company. Fresenius operates approximately 2,000 clinics and treats over 37% of the dialysis patients in the U.S. Fresenius also manufactures and sells a full range of renal products, including dialysis machines, dialyzers (artificial kidneys), concentrates and other supplies used in hemodialysis. In addition to its captive customer base, Fresenius also services clinics owned by others with its products where it commands a market leading position in its key product lines. Fresenius manufactures its concentrate in its own regional manufacturing facilities. Other than Rockwell, there are no other major dialysis concentrate suppliers in the United States.

Iron Therapy Market Competition

We intend to enter the iron delivery therapy market upon obtaining FDA approval for Triferic®. We expect Triferic® will be disruptive to the US IV iron market. Presently the IV iron drug Venofer® has the majority of the market for delivering iron to CKD-HD patients in the US. Venofer® is owned by Switzerland-based Galenica. Galenica recently received approval to market a new product called Ferinject®. Fresenius has a sublicense agreement to manufacture and distribute Venofer® to the dialysis market in the US and Canada. Sanofi-Aventis markets the IV iron drug Ferrlecit® in the United States. Watson, a large manufacturer of both generic and branded drugs, introduced a generic IV iron in 2011 called Nulecit®. AMAG Pharmaceuticals, Inc. markets Feraheme®.

The markets for drug products are highly competitive. Competition in drug delivery systems is generally based on marketing strength, product performance characteristics (i.e., reliability, safety, patient convenience) and product price. Acceptance by dialysis providers and nephrologists is also critical to the success of a product. The first product on the market in a particular therapeutic area typically is able to obtain and maintain a significant market share. In a highly competitive marketplace and with evolving technology, additional product introductions or developments by others could render our products or technologies noncompetitive or obsolete. In addition, pharmaceutical and medical device companies are largely dependent upon health care providers being reimbursed by private insurers and government payors. Drugs approved by the FDA might not receive reimbursement from private insurers or government payors.

Prior to 2011, the Centers for Medicare & Medicaid Services ("CMS") had historically paid providers for dialysis treatments under the Medicare program in two parts: the composite rate and separately reimbursed drugs and services. The composite rate is payment for the complete dialysis treatment except for physicians' professional services, separately billed laboratory services and separately billed drugs. CMS began implementation of a fully bundled reimbursement rate in 2011, which we believe will benefit our marketing efforts. The bundled rate is a single payment per treatment, thereby eliminating reimbursement for individual drugs and services to providers. As a result dialysis drugs are now viewed by providers as an additional cost rather than as a source of revenue. With FDA approval, we believe Triferic®, due to its potential for improved therapeutic response, ability to reduce the need for costly ESA and lower cost of administration, will be an attractive alternative to IV iron under this reimbursement landscape.

Vitamin D Therapy Market Competition

We intend to market Calcitriol injection against two competitors with branded vitamin D products, as well as other generic drug competitors. Abbott Laboratories markets Zemplar® and Sanofi-Aventis, through its Genzyme subsidiary, markets Hectorol®. Other companies offer oral forms of vitamin D. A handful of other companies have historically marketed generic Calcitriol. We believe the dialysis reimbursement law that went into effect in January 2011, along with our current dialysis concentrates market share position, provides us an advantage to sell Calcitriol over other competitors in the market.

Quality Assurance and Control

Dialysis Concentrate Solutions Business

We operate under FDA and cGMP guidelines and place significant emphasis on providing quality products and services to our customers. Our quality management plays an essential role in meeting customer requirements and FDA guidelines. We have implemented quality systems that involve control procedures that result in rigid conformance to specifications. Our quality systems also include assessments of suppliers of raw materials, packaging components and finished goods, and quality management reviews designed to inform management of key issues that may affect the quality of products, assess the effectiveness of our quality systems and identify areas for improvement.

Technically trained professionals at our production facilities maintain our quality system. To assure quality and consistency of our concentrates, we conduct specific analytical tests during the manufacturing process for each type of product that we manufacture. Prior to shipment, our quality control laboratory at each facility conducts analytical tests to verify that the chemical properties of the concentrates comply with the specifications required by industry standards. Each product is assigned a lot number for tracking purposes.

Drug Manufacturing

We utilize contract manufacturing organizations ("CMOs") to manufacture and package our drug products including drugs used in our clinical trials. These contract manufacturers are FDA approved drug manufacturing establishments. We follow defined procedures to qualify manufacturers of our products and to review and approve all manufactured products to ensure compliance with FDA cGMP regulations.

Government Regulation

The testing, manufacture and sale of our hemodialysis concentrates and the ancillary products we distribute are subject to regulation by numerous governmental authorities, principally the FDA and corresponding state and foreign agencies. Under the Federal Food, Drug and Cosmetic Act, as amended (the "FD&C Act"), and FDA regulations, the FDA regulates the pre-clinical and clinical testing, manufacture, labeling, distribution and marketing of medical devices. Noncompliance with applicable requirements can result in, among other things, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, failure of the government to grant pre-market clearance or pre-market approval for devices, withdrawal of marketing clearances or approvals and criminal prosecution.

We plan to develop and commercialize selected drug candidates by ourselves, such as Triferic®. The development and regulatory approval process includes preclinical testing and human clinical trials and is lengthy and uncertain. Before marketing in the United States, any pharmaceutical or therapeutic product must undergo rigorous preclinical testing and clinical trials and an extensive regulatory approval process implemented by the FDA under the FD&C Act.

Moreover, the FDA imposes substantial requirements on new product research and the clinical development, manufacture and marketing of pharmaceutical products, including testing and clinical trials to establish the safety and effectiveness of these products.

Medical Device Approval and Regulation

A medical device may be marketed in the United States only with prior authorization from the FDA unless it is subject to a specific exemption. Devices classified as Class I devices (general controls) or Class II devices (general and special controls) are eligible to seek "510(k) clearance" from the FDA. Such clearance generally is granted when submitted information establishes that a proposed device is "substantially equivalent" in terms of safety and effectiveness to a legally marketed device that is not subject to premarket approval. A legally marketed device is a "pre-amendment" device that was legally marketed prior to May 28, 1976, a device that has been reclassified from Class III to Class I or II, or a device which has been found substantially equivalent through the 510(k) process. The FDA in recent years has been requiring a more rigorous demonstration of substantial equivalence than in the past, including requiring clinical trial data in some cases. For any devices that are cleared through the 510(k) process, modifications or enhancements that could significantly affect safety or effectiveness, or constitute a major change in the intended use of the device, will require new 510(k) submissions. We have been advised that it usually takes from three to six months from the date of submission to obtain

510(k) clearance, and may take substantially longer. Our hemodialysis concentrates, liquid bicarbonate and other ancillary products are categorized as Class II devices.

A device which sustains or supports life, prevents impairment of human health or which presents a potential unreasonable risk of illness or injury is categorized as a Class III device. A Class III device generally must receive approval through a pre-market approval ("PMA") application, which requires proving the safety and effectiveness of the device to the FDA. The process of obtaining PMA approval is expensive and uncertain. We have been advised that it usually takes approximately one year to obtain approval after filing the request, and may take substantially longer.

If human clinical trials of a device are required, whether for a 510(k) submission or a PMA application, and the device presents a "significant risk," the sponsor of the trial (usually the manufacturer or the distributor of the device) will have to file an investigational device exemption ("IDE") application prior to commencing human clinical trials. The IDE application must be supported by data, typically including the results of animal and laboratory testing. If the IDE application is approved by the FDA and one or more appropriate Institutional Review Boards ("IRBs"), the device may be shipped for the purpose of conducting the investigations without compliance with all of the requirements of the FD&C Act and human clinical trials may begin. The FDA will specify the number of investigational sites and the number of patients that may be included in the investigation. If the device does not present a "significant risk" to the patient, a sponsor may begin the clinical trial after obtaining approval for the study by one or more appropriate IRBs without the need for FDA approval.

Any devices manufactured or distributed by us pursuant to FDA clearances or approvals are subject to pervasive and continuing regulation by the FDA and certain state agencies. As a manufacturer of medical devices for marketing in the United States we are required to adhere to regulations setting forth detailed cGMP requirements, which include testing, control and documentation requirements. We must also comply with medical device reporting regulations which require that we report to the FDA any incident in which our products may have caused or contributed to a death or serious injury, or in which our products malfunctioned and, if the malfunction were to recur, it would be likely to cause or contribute to a death or serious injury. Under such a scenario, our products may be subject to voluntary recall by us or by required recall by the FDA. Labeling and promotional activities are subject to scrutiny by the FDA and, in certain circumstances, by the Federal Trade Commission. The FD&C Act prohibits the marketing of approved medical devices for unapproved uses.

We are subject to routine inspection by the FDA and certain state agencies for compliance with cGMP requirements and other applicable quality system regulations. We are also subject to numerous federal, state and local laws relating to such matters as safe working conditions, manufacturing practices, environmental protection, fire hazard control, transportation and disposal of hazardous or potentially hazardous substances.

We have 510(k) clearance from the FDA to market hemodialysis concentrates in both liquid and powder form. In addition, we have received 510(k) clearance for our Dry Acid Concentrate Mixer.

We must comply with the FD&C Act and related laws and regulations, including cGMP, to retain 510(k) clearances. We cannot assure you that we will be able to maintain our 510(k) clearances from the FDA to manufacture and distribute our products. If we fail to maintain our 510(k) clearances, we may be required to cease manufacturing and/or distributing our products, which would have a material adverse effect on our business, financial condition and results of operations. If any of our FDA clearances are denied or rescinded, sales of our products in the United States would be prohibited during the period we do not have such clearances.

In addition to the regulations for medical devices covering our current dialysate products, our new product development efforts will be subject to the regulations pertaining to pharmaceutical products.

We have signed a licensing agreement for Triferic®. Our Triferic® and Calcitriol products will be subject to FDA drug regulations.

Drug Approval and Regulation

The marketing of pharmaceutical products, such as Triferic® in the United States, requires the approval of the FDA. We plan to file our NDA for Triferic® in the first quarter of 2014. The FDA has established regulations, guidelines and safety standards which apply to the pre-clinical evaluation, clinical testing, manufacturing and marketing of our new iron maintenance therapy product and other pharmaceutical products. The steps required before a pharmaceutical product can be produced and marketed for human use include: (i) pre-clinical studies; (ii) submission to the FDA of an Investigational New Drug Application ("IND"), which must become effective before human clinical trials may commence in the United States; (iii) adequate and well controlled human clinical trials; (iv) submission to the FDA of a NDA or, in some cases, an Abbreviated New Drug Application ("ANDA"); and (v) review and approval of the NDA or ANDA by the FDA. An NDA generally is required for products with new active ingredients, new indications, new routes of administration, new dosage forms or new strengths. An NDA requires that complete clinical studies of a product's safety and efficacy be submitted to the FDA, the cost of which is substantial. The costs are often less, however, for new delivery systems which utilize already approved drugs than for drugs with new active ingredients.

An ANDA is a marketing application filed as part of an abbreviated approval process that is available for generic drug products that have been determined to be "bioequivalent" to an FDA-approved drug. This requires that the generic drug product have the same amount of active ingredient(s) absorbed in the same amount of time, use indication, route of administration, dosage form and dosage strength as an existing FDA-approved product. In addition the generic drug product must be manufactured in accordance with cGMP and meet requirements for batch identity, strength, purity and quality. Under applicable regulations, companies that seek to introduce an ANDA product must also certify that the product does not infringe on the approved product's patent or that such patent has expired. If the applicant certifies that its product does not infringe on the approved product's patent, the patent holder may institute legal action to determine the relative rights of the parties and the application of the patent, and the FDA may not finally approve the ANDA until a court finally determines that the applicable patent is invalid or would not be infringed by the applicant's product.

Pre-clinical studies are conducted to obtain preliminary information on a pharmaceutical product's efficacy and safety in animal or in vitro models. The results of these studies are submitted to the FDA as part of the IND and are reviewed by the FDA before human clinical trials begin. Human clinical trials may begin 30 days after receipt of the IND by the FDA unless the FDA objects to the commencement of clinical trials.

Human clinical trials are typically conducted in three sequential phases, but the phases may overlap. Phase 1 trials consist of testing the product primarily for safety, metabolism and pharmacologic action in a small number of patients or healthy volunteers at one or more doses. In Phase 2 trials, the safety and efficacy of the product are evaluated in a patient population somewhat larger than the Phase 1 trials with the primary intent of determining the effective dose range. Phase 3 trials typically involve additional testing for safety and clinical efficacy in an expanded population at a large number of test sites. A clinical plan, or protocol, accompanied by documentation from the institutions participating in the trials, must be received by the FDA prior to commencement of each of the clinical trials. The FDA may order the temporary or permanent discontinuation of a clinical trial at any time.

The results of product development and pre-clinical and clinical studies are submitted to the FDA as an NDA or an ANDA for approval. If an application is submitted, there can be no assurance that

the FDA will review and approve the NDA or an ANDA in a timely manner. The FDA may deny an NDA or an ANDA if applicable regulatory criteria are not satisfied or it may require additional testing, including pre-clinical, clinical and or product manufacturing tests. Even if such data are submitted, the FDA may ultimately deny approval of the product. Further, if there are any modifications to the drug, including changes in indication, manufacturing process, labeling, or a change in a manufacturing facility, an NDA or an ANDA supplement may be required to be submitted to the FDA. Product approvals may be withdrawn after the product reaches the market if compliance with regulatory standards is not maintained or if problems occur regarding the safety or efficacy of the product. The FDA may require testing and surveillance programs to monitor the effect of products which have been commercialized, and has the power to prevent or limit further marketing of these products based on the results of these post-marketing programs.

Manufacturing facilities are subject to periodic inspections for compliance with regulations and each domestic drug manufacturing facility must be registered with the FDA. Foreign regulatory authorities may also have similar regulations. We expend significant time, money and effort in the area of quality assurance to fully comply with all applicable requirements. FDA approval to manufacture a drug is site specific. In the event an approved manufacturing facility for a particular drug becomes inoperable, obtaining the required FDA approval to manufacture such drug at a different manufacturing site could result in production delays, which could adversely affect our business and results of operations. Manufacturers and distributors must comply with various post-market requirements, including adverse event reporting, re-evaluation of approval decisions and notices of changes in the product.

Other Government Regulations

The federal and state governments in the United States, as well as many foreign governments, from time to time explore ways to reduce medical care costs through health care reform. Due to uncertainties regarding the ultimate features of reform initiatives and their enactment and implementation, we cannot predict what impact any reform proposal ultimately adopted may have on the pharmaceutical and medical device industry or on our business or operating results. Recently enacted health reform legislation has resulted in material changes to the Medicare and Medicaid programs and levels of reimbursement, imposes excise taxes on medical devices and pharmaceutical products and requires medical device and pharmaceutical manufacturers to report certain relationships they have with physicians and teaching hospitals. Our activities are subject to various federal, state and local laws and regulations regarding occupational safety, laboratory practices, and environmental protection and may be subject to other present and possible future local, state, federal and foreign regulations.

The approval procedures for the marketing of our products in foreign countries vary from country to country, and the time required for approval may be longer or shorter than that required for FDA approval. We generally depend on our foreign distributors or marketing partners to obtain the appropriate regulatory approvals to market our products in those countries which typically do not require additional testing for products that have received FDA approval.

However, since medical practice and governmental regulations differ across regions, further testing may be needed to support market introduction in some foreign countries. Some foreign regulatory agencies may require additional studies involving patients located in their countries. Even after foreign approvals are obtained, further delays may be encountered before products may be marketed. Issues related to import and export can delay product introduction. Many countries require additional governmental approval for price reimbursement under national health insurance systems.

Product License Agreements

We are party to a license agreement for Triferic® that covers issued patents in the United States, the European Union and Japan, as well as other foreign jurisdictions. We licensed the product from a company owned by Dr. Ajay Gupta who subsequently joined us as our Chief Scientific Officer. The license agreement continues for the duration of the underlying patents in each country, or until December 30, 2017 in the United States, and may be extended thereafter under the Hatch-Waxman Act. Patents were issued in the United States in 2004. The European patent was issued in 2005 and extends through 2017. The Japanese patent was issued in 2007 and extends through 2017. If we are successful in obtaining FDA approval we may apply for an extension of our patent exclusivity for up to five years. As noted below in "Trademarks and Patents," the Company has also received patent protection on the pharmaceutical grade formulation of the active pharmaceutical ingredient in Triferic® which extends patent protection until 2029.

Our Triferic® license agreement requires us to obtain and pay the cost of obtaining FDA approval of the product in order to realize any benefit from commercialization of the product. In addition to funding safety pharmacology testing, clinical trials and patent maintenance expenses, we are obligated to make certain milestone payments and to pay ongoing royalties upon successful introduction of the product. The milestone payments include a payment of $50,000 which will become due upon completion of the last Phase 3 study report in 2014, a payment of $100,000 which will become due upon FDA approval of the product and a payment of $175,000 which will become due upon issuance of a reimbursement code covering the product.

We own an ANDA for Calcitriol. We are in the process of obtaining FDA approval to market this product following manufacturing changes relating to a CMO that we have contracted with to manufacture Calcitriol.

Trademarks and Patents

We have several trademarks and servicemarks used on our products and in our advertising and promotion of our products, and we have applied for U.S. registration of such marks. Most such applications have resulted in registration of such trademarks and servicemarks.

We were issued a U.S. patent on the synthesis and formulation of our pharmaceutical grade formulation of Triferic®. The U.S patent expires on April 17, 2029. Patents have also been granted in Europe and Canada and a patent application is pending Japan. We have numerous other patents and patent applications connected to Triferic® pending in various countries.

We also own patents in the U.S. and Canada for our Dry Acid Concentrate method and apparatus for preparing liquid dialysate which expire on September 17, 2019. Expiration of these patents is not expected to have a material impact on our business.

Suppliers

We believe the raw materials and packaging materials for our hemodialysis concentrates, the components for our hemodialysis kits and the ancillary hemodialysis products distributed by us are generally available from several potential suppliers. We intend to engage CMOs for the manufacture and packaging of our drug products. There are several potential CMOs that are able to manufacture and package our drug products and so it is unlikely we will be dependent on any particular CMO.

Customers

We operate in one market segment which involves the manufacture and distribution of hemodialysis concentrates, dialysis kits and ancillary products used in the dialysis process to hemodialysis clinics. For the years ended December 31, 2013, 2012 and 2011, one customer, DaVita

Healthcare Partners, Inc., accounted for 49%, 49% and 48% of our sales, respectively. Our accounts receivable from this customer were $1,886,000 and $2,352,000 as of December 31, 2013 and 2012, respectively. This key customer is important to our business and the loss of its business could have a material adverse effect on our business, financial condition and results of operations. No other customer accounted for more than 10% of our sales in any of the last three years.

The majority of our international sales in each of the last three years were sales to domestic distributors that were resold to end users outside the United States. Our sales to foreign customers and distributors were less than 5% of our total sales in 2013, 2012 and 2011. We have no assets outside the United States. Our total international sales, including sales to domestic distributors for resale outside the United States, aggregated 12%, 11% and 13%, of overall sales in 2013, 2012 and 2011, respectively.

Employees

As of December 31, 2013, we had approximately 286 employees, substantially all of whom are full time employees. Our arrangements with our employees are not governed by any collective bargaining agreement. Our employees are employed on an "at-will" basis.

Research & Development

Over the last several years we have invested heavily in the testing and development of Triferic®. We completed the human clinical trials and other testing required to submit an NDA in 2013 and will submit an NDA for Triferic® to the FDA in 2014. We engaged outside service providers, contract research organizations, consultants and legal counsel to assist us with clinical trials, product development and obtaining regulatory approval. We incurred product development and research costs related to the commercial development, patent approval and regulatory approval of new products, including Triferic®, aggregating approximately $39,382,000, $48,272,000, and $17,805,000 in 2013, 2012 and 2011, respectively.

Where You Can Get Information We File with the SEC

Our internet address is http://www.rockwellmed.com. You can access free of charge on our web site all of our reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports. These reports are available as soon as practicable after they are electronically filed with the SEC.

The SEC also maintains a website on the internet that contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC. The address of the SEC's Web site is http://www.sec.gov.

Item 1A. Risk Factors.

Investing in our common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below before purchasing our common stock. The risks and uncertainties described below are not the only ones facing our company. Additional risks and uncertainties may also impair our business operations. If any of the following risks actually occur, our business, financial condition or results of operations would likely suffer. In that case, the trading price of our common stock could fall, and you may lose all or part of the money you paid to buy our common stock.

RISKS RELATED TO OUR BUSINESS

Before it can be marketed, our lead drug candidate requires FDA approval, a long, expensive process with no guarantee of success.

We are seeking FDA approval for Triferic®, our lead drug candidate. Obtaining FDA approval for any drug can take a long time. The FDA may find deficiencies in our NDA, may raise safety or efficacy concerns or may otherwise require additional clinical testing or impose other requirements before approving Triferic®, which could significantly delay approval or result in us not receiving approval at all.

Clinical trials and the NDA approval process are expensive and time consuming to complete. Any such delays or additional testing or other requirements may require us to raise additional capital which may not be available when needed or may be available only on terms that are not in the best interests of the Company and its shareholders or which result in substantial dilution of shareholders' voting power and ownership.

It is possible that Triferic® may never be approved by the FDA. If we are unable to obtain FDA approval or if such approval is substantially delayed, our entire investment in new products may be worthless, our licensing rights could be forfeited and the price of our common stock could substantially decline.

Even if Triferic® is approved by the FDA, we may not be able to market it successfully.

Even if Triferic® is approved by the FDA, the commercial success of Triferic® will depend on a number of factors, including the following:

- one drug currently dominates treatment for iron deficiency and Triferic® will have to compete against it and other existing products;
- it may be difficult to gain market acceptance from dialysis chains, anemia managers and nephrologists or such acceptance may be slower than expected. Market acceptance will depend on a number of factors, such as demonstration of Triferic®'s safety and efficacy, its cost-effectiveness, its advantages over existing products, and the reimbursement policies of government and third party payors, including Medicare;
- maintaining compliance with ongoing regulatory requirements applicable to Triferic® which may be imposed by the FDA as part of the approval or which apply generally to the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion and recordkeeping applicable to the product;
- the effectiveness of our marketing, sales and distribution strategies and operations for development and commercialization of Triferic® and our ability to execute our marketing strategy without significant additional expenditures;
- our ability to avoid third party patent interference or patent infringement claims; and
- a continued acceptable safety profile of Triferic® following approval. Later discovery of previously unknown problems with Triferic® or with any third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in regulatory action that could have a material adverse effect on our ability to manufacture and market Triferic®.

Many of these factors are beyond our control. Accordingly, we cannot assure you that we will be able to generate revenues through the sale of Triferic®. If we are not successful in commercializing Triferic®, or are significantly delayed in doing so, our entire investment in Triferic® may be worthless, our licensing rights could be forfeited and the price of our common stock could substantially decline.

If we do not obtain protection under the Hatch-Waxman Act to extend patent protection for Triferic®, our business may be harmed.

The United States Drug Price Competition and Patent Term Restoration Act of 1984, more commonly known as the "Hatch-Waxman Act," provides that patent holders may apply for an extension of patent term for drugs for a period of up to five years to compensate for time spent in development and regulatory approval. There can be no assurance that we will receive the extension of the patent term provided under the Hatch-Waxman Act. If we fail to receive such extension, our ability to prevent competitors from manufacturing, marketing and selling generic versions of Triferic® could be impaired and we would have to rely on the protection afforded us by the U.S. patent we hold on the synthesis and formulation of our pharmaceutical grade formulation of Triferic® which expires in 2029 or on other patents related to Triferic® that may be issued to us in the future.

FDA approval to manufacture Calcitriol may take longer than we anticipate and commercial launch may be delayed or may not be widely adopted when launched.

We are seeking FDA approval for a change in manufacturing location for a generic version of Calcitriol, the ANDA for which we acquired from a third party. The timing for receiving approval of this change from the FDA is not predictable. If we receive approval of this change, we must meet certain ongoing regulatory requirements for product testing and stability of our commercially marketed products. If our testing does not meet approvable standards or if we experience operational issues with our CMO we may not be able to market Calcitriol.

The market for generic drugs such as Calcitriol is generally very competitive. Even if the FDA approves our change in manufacturing location for Calcitriol so that we can begin marketing it, we may encounter a very competitive environment for Calcitriol which may make it difficult for us to capture significant market share. If we do have success in capturing market share with Calcitriol, it may attract other entrants to market their own generic version of Calcitriol, which could have a material adverse effect on our future revenues and results of operations. Branded competitors may aggressively lower their prices to maintain market share.

We could be prevented from selling products, forced to pay damages and compelled to defend against litigation if we infringe the rights of a third party.

Our success, competitive position and future revenues will depend in part on our ability to obtain and maintain patent protection for our products, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing the proprietary rights of third parties.

We could incur substantial costs in seeking enforcement of our patent rights against infringement, and we cannot guarantee that such patents will successfully preclude others from using technology that we rely upon. We have no knowledge of any infringement or patent litigation, threatened or filed at this time. It is possible that we may infringe on intellectual property rights of others without being aware of the infringement. If a third party believes that one of our products infringes on the third party's patent, it may sue us even if we have received our own patent protection for the technology. If we infringe the rights of a third party, we could be prevented from selling products, forced to pay damages and compelled to defend against litigation.

We may not be successful in obtaining foreign regulatory approvals or in arranging a business development, out-licensing or other venture to realize commercialization of our drug products outside of the United States.

The approval procedures for the marketing of our new drug products, such as Triferic®, in foreign countries vary from country to country, can be difficult to obtain and carry all of the same risks as FDA approval. In particular, regulatory approval in foreign countries may require additional testing in

the applicable country, may otherwise be expensive to undertake and may take a long time to obtain. Even after foreign approvals are obtained, further delays may be encountered before products may be marketed. Many countries require additional governmental approval for price reimbursement under national health insurance systems.

Even if we obtain the necessary foreign approval in a particular market, we do not have substantial expertise selling and marketing on an international level and therefore may not be successful in realizing commercial value from our products. Our strategy for addressing the need for expertise in obtaining foreign approvals and marketing in foreign markets is to out-license rights to Triferic® in markets outside the United States. However, we may not be successful in finding a partner or partners who will be willing to invest in Triferic® outside the United States. If we are not successful in out-licensing Triferic® outside of the United States or entering into some other business development arrangement to obtain the necessary approvals and market Triferic®, we may be forced to seek regulatory approval and market the product ourselves. If we elect to seek approval ourselves in certain markets, it may take longer than expected to obtain needed regulatory approvals and to market and manufacture Triferic®, and we may decide to delay or abandon development efforts in certain markets.

Any such delay or abandonment, or any failure to receive one or more foreign approvals, may have a material adverse effect on the benefits otherwise expected from marketing in foreign countries.

Our dialysis concentrate business is substantially dependent on a few customers that account for a substantial portion of our sales. The loss of any of these customers could have a material adverse effect on our results of operations and cash flow from our dialysis business and on our ability to market our new drug products.

Our revenue is highly concentrated in a few customers and the loss of any of those customers could adversely affect our results of operations. One customer in particular accounted for nearly half of our sales in each of the last three years and for a substantial number of the clinics we serve. Our strategy is to develop new renal drugs and market them to our existing dialysis clinic customers. If we were to lose this customer or our relationship with any of our other major dialysis chain customers, it could have a substantial negative impact on the cash flow and operating results of our dialysis concentrate business and may have a detrimental impact on our ability to market our new drug products.

We operate in a very competitive market against a substantially larger competitor with greater resources.

There is intense competition in the hemodialysis product market and our primary competitor is a large diversified company which has substantially greater financial, technical, manufacturing, marketing, research and development and management resources than we do. We may not be able to successfully compete with them or other companies. Our primary competitor has historically used product bundling and low pricing as marketing techniques to capture market share of the products we sell and as we do not manufacture or sell the same breadth of products as our primary competitor, we may be at a disadvantage in competing against their marketing strategies. Furthermore, our primary competitor is vertically integrated and is the largest provider of dialysis services in the United States with approximately 37% of all U.S. patients treated by this company through its clinics. This competitor has routinely acquired smaller clinic chain operations that we served and may acquire more of our customers in the future.

We may not be successful in maintaining our gross profit margins.

A significant portion of our costs are for chemicals and fuel which are subject to pricing volatility based on demand and are highly influenced by the overall level of economic activity in the U.S. and abroad. These costs have risen each year and have had a negative effect on our gross margins. We may

realize future cost and pricing pressure which may cause our gross profit margins to decrease in the future and have a material adverse effect on our results of operations.

Our dialysis solutions products are distribution-intensive, resulting in a high cost to deliver relative to the selling prices of our products. The cost of diesel fuel represents a significant operating cost for us. If oil costs increase, we may be unable to recover those increased costs through higher pricing. Also, as we increase our business in certain markets and regions that are farther from our manufacturing facilities than we have historically served, we may incur additional costs that are greater than the additional revenue generated from these initiatives. Our customer mix may change to a less favorable customer base with lower gross profit margins.

Our competitors have often used bundling techniques to sell a broad range of products and have often offered low prices on dialysis concentrate products to induce customers to purchase their other higher margin products, such as dialysis machines and dialyzers. It may be difficult for us to raise prices due to these competitive pressures.

Our suppliers may increase their prices faster than we are able to raise our prices to offset such increases. We may have limited ability to gain a raw material pricing advantage by changing vendors for certain chemicals and packaging materials.

As we increase our manufacturing and distribution infrastructure we may incur costs for an indefinite period that are greater than the incremental revenue we derive from these expansion efforts.

We depend on government funding of health care, changes in which could impact our ability to be paid in full for our products, increase pricing pressures or cause consolidation in the dialysis provider market.

Many of our customers receive the majority of their funding from the government and are supplemented by payments from private health care insurers. Our customers depend on Medicare and Medicaid funding to be viable businesses. A variety of changes to health insurance and reimbursement are included in health reform legislation enacted by Congress in recent years. Some of these changes could have a negative impact on Medicare and Medicaid funding, which fund the majority of dialysis costs in the United States, and on reimbursement protocols. If Medicare and Medicaid funding were to be materially decreased, our customers would be severely impacted, increasing our risk of not being paid in full by our customers. An increase in our exposure to uncollectible accounts could have a material adverse effect on our financial position, results of operations and cash flows.

In the United States, the Medicare Improvements for Patients and Providers Act of 2008 or "MIPPA" changed the dialysis reimbursement method from the prior practice of separately billed services and medications to a single bundled prospective rate for Medicare outpatient ESRD facilities beginning January 1, 2011, with full implementation by January 1, 2012. Most dialysis providers have adopted this method of reimbursement, which provides for a single payment per dialysis treatment compared to the current method consisting of a composite rate payment and separately billed drugs and services. We anticipate that dialysis providers will continue to seek ways to reduce their costs per treatment due to this change in reimbursement practice which could reduce our sales and profitability and have a material adverse effect on our business, financial condition and results of operations.

As a result of these changes to Medicare reimbursement, industry observers also anticipate increased consolidation in the dialysis provider market which has been largely unchecked by the Federal Trade Commission to date. Continued consolidation in providers will likely result in increased purchasing leverage for providers across all dialysis product categories and increased pricing pressure on all suppliers to the industry.

We will rely on third party suppliers for raw materials, packaging components and manufacturing of our drug products for our commercially marketed drug products once they are approved. We may not be able to obtain the raw materials, components and manufacturing capacity we need, or the cost of the materials, components and manufacturing capacity may be higher than expected, any of which could have a material adverse effect on our expected results of operations, financial position and cash flows.

For our drug products, we will rely on unaffiliated third-party suppliers for raw materials, packaging components and manufacturing of our finished drug products. Certain of those raw materials and packaging components may be the proprietary products of those unaffiliated third-party suppliers and are specifically cited in our drug application with regulatory agencies so that they must be obtained from that specific source or sources and could not be obtained from another supplier unless and until the regulatory agency has approved such supplier. We may not be able to obtain needed raw materials, packaging components and manufacturing capacity for a variety of reasons, including among others:

regulatory requirements or action by regulatory agencies or others;

adverse financial or other strategic developments at or affecting the supplier or contract manufacturer;

unexpected demand for or shortage of raw materials or packaging components;

failure to comply with cGMP standards which results in quality or product failures, adulteration, contamination and/or recall;

limitations in capacity of contract manufacturers; and,

changes in product demand.

If we are unable to obtain the raw materials, components and manufacturing capacity we require, or if we are charged more than expected for these items, we may not be able to produce our drug products or our gross profit margins may be materially adversely affected.

Health care reform could adversely affect our business.

The federal and state governments in the United States, as well as many foreign governments, from time to time explore ways to reduce medical care costs through health care reform. The federal Medicare and Medicaid programs are facing financial challenges and are looking at ways to reduce the costs of the Medicare and Medicaid programs. Similarly, many states have large deficits which may prove unsustainable, resulting in defaults on state debt obligations which may ultimately result in the reduction or curtailment of health care benefits or state Medicaid reimbursement.

In the United States, Congress enacted the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, referred to collectively as PPACA, in 2010 that has made significant changes to the health care payment and delivery system. The PPACA requires employers to provide employees with insurance coverage that meets minimum eligibility and coverage requirements or face penalties. The PPACA also includes provisions that impact the number of individuals with insurance coverage, including expansion of those eligible for Medicaid in some states, the types of coverage and level of health benefits that are required and the amount of payment providers performing health care services receive. The PPACA imposes implementation effective dates beginning in 2010 and extending through 2020. In addition, the PPACA imposes fees or excise taxes on pharmaceutical and device manufacturers based on their sales results. As a result, the Company was required to pay $0.8 million in excise taxes in 2013. The U.S. government faces structural deficits that may require changes to government funded healthcare programs such as Medicare and Medicaid which may negatively impact customers of our products. On March 1, 2013, President Obama issued a sequestration order that imposed a 2% "across the board" reduction in Medicare reimbursement. Our sales, results of operations, cash flows and ability to commercialize our drug

products could be materially impacted by the PPACA, future health care reform or reduced Medicare and Medicaid spending by the federal government.

Beginning in early 2014 and annually thereafter, device and pharmaceutical manufacturers are required to report to the FDA regarding certain financial relationships they have with physicians and teaching hospitals. This reporting requirement will increase governmental scrutiny on our contractual relationships with physicians and teaching hospitals and will increase the risk that inadvertent violations result in liability under the federal fraud and abuse laws, which could have a material adverse effect on our results of operations, financial position and cash flows.

We depend on key personnel, the loss of which could harm our ability to operate.

Our success depends heavily on the efforts of Robert L. Chioini, a founder and our President and Chief Executive Officer, Dr. Ajay Gupta MD, our Chief Scientific Officer, Dr. Raymond D. Pratt, our Chief Medical Officer and Thomas E. Klema, our Chief Financial Officer, Secretary and Treasurer. Mr. Chioini is primarily responsible for the strategic direction of the Company and for managing our sales and marketing efforts. Dr. Gupta is primarily responsible for discovery and development of new technologies. Dr. Pratt is primarily responsible for the clinical development, testing and regulatory approval of our products. None of our executive management are parties to a current employment agreement with the Company. If we lose the services of Mr. Chioini, Dr. Gupta, Dr. Pratt or Mr. Klema, our business, product development efforts, financial condition and results of operations could be adversely affected.

Our business is highly regulated, which increases our costs and results in risks relating to potential noncompliance.

The testing, manufacture and sale of the products we manufacture and distribute are subject to extensive regulation by the FDA and by other federal, state and foreign authorities. Before medical devices can be commercially marketed in the United States, the FDA must give either 510(k) clearance or pre-market approval for the devices. If we do not comply with these requirements, we may be subject to a variety of sanctions, including fines, injunctions, seizure of products, suspension of production, denial of future regulatory approvals, withdrawal of existing regulatory approvals and criminal prosecution. Our business could be adversely affected by any of these actions.

Although our hemodialysis concentrates have been cleared by the FDA, it could rescind these clearances and any new products or modifications to our current products that we develop could fail to receive FDA clearance. If the FDA rescinds or denies any current or future clearances or approvals for our products, we would be prohibited from selling those products in the United States until we obtain such clearances or approvals. Our business would be adversely affected by any such prohibition, any delay in obtaining necessary regulatory approvals, and any limits placed by the FDA on our intended use. Our products are also subject to federal regulations regarding manufacturing quality. In addition, our new products will be subject to review and approval by the FDA. The process of obtaining such approval is time-consuming and expensive. In addition, changes in applicable regulatory requirements could significantly increase the costs of our operations and may reduce our profitability if we are unable to recover any such cost increases through higher prices.

We may not have sufficient products liability insurance.

As a supplier of medical products, we may face potential liability from a person who claims that he or she suffered harm as a result of using our products. We maintain products liability insurance in the amount of $5 million per occurrence and $5 million in the aggregate. We cannot be sure that it will remain economical to retain our current level of insurance, that our current insurance will remain available or that such insurance would be sufficient to protect us against liabilities associated with our

business, particularly if it expands substantially in the wake of the potential FDA approval of Triferic®. We may be sued, and we may have significant legal expenses that are not covered by insurance. In addition, our reputation could be damaged by product liability litigation and that could harm our marketing ability. Any litigation could also hurt our ability to retain products liability insurance or make such insurance more expensive. Our business, financial condition and results of operations could be adversely affected by an uninsured or inadequately insured product liability claim in the future.

RISKS RELATED TO OUR COMMON STOCK

Shares eligible for future sale may negatively affect the market price of our common shares.

Any additional future sales of common shares by us may have a negative effect on the market price of our common shares. Sales of substantial amounts of our common shares (including shares issued upon the exercise of stock options or warrants), or the possibility of such sales, could adversely affect the market price of our common shares and also impair our ability to raise capital through an offering of our equity securities in the future. As of December 31, 2013, an additional 983,071 shares may be issued upon exercise of outstanding warrants. In the future, we may issue additional shares or warrants in connection with investments or for other purposes considered advisable by our Board of Directors. Any substantial sale of our common shares may have an adverse effect on the market price of our common shares and may dilute the economic value and voting rights of existing shareholders.

In addition, as of December 31, 2013, there were 4,513,567 shares issuable upon the exercise of outstanding and exercisable stock options, 1,714,433 shares issuable upon the exercise of outstanding stock options that are not yet exercisable and 1,409,165 additional shares available for grant under our 2007 Long Term Incentive Plan. Additional grants have been made in 2014. The market price of the common shares may be depressed by the potential exercise of these options or warrants. The holders of these options and warrants are likely to exercise them when we would otherwise be able to obtain additional capital on more favorable terms than those provided by the options.

Our stock price could be volatile.

Our stock price, like the market price of many stocks in the biotechnology and pharmaceutical industries, is volatile. Events such as announcements around clinical testing results or regulatory approval of a product, as well as the reporting of sales, operating results and cash resources, may cause significant fluctuations in our share price. In addition, third parties may engage in trading strategies that result in intentional volatility to our share price, given our relatively small public market float.

We could have a material weakness in our internal control over financial reporting, which, until remedied, could result in errors in our financial statements requiring restatement of our financial statements. As a result, investors may lose confidence in our reported financial information, which could lead to a decline in our stock price.

SEC rules require us to evaluate the effectiveness of our internal control over financial reporting as of the end of each year, and to include a management report assessing the effectiveness of our internal control over financial reporting in each Annual Report on Form 10-K. It is possible, due to the small size of our accounting staff, that we may identify control deficiencies in the future that constitute one or more material weaknesses. If our internal control over financial reporting or disclosure controls and procedures are not effective, there may be errors in our financial statements and in our disclosure that could require restatements. Investors may lose confidence in our reported financial information and in our disclosure, which could lead to a decline in our stock price.

No system of internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must

reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. Over time, controls may become inadequate because changes in conditions or deterioration in the degree of compliance with policies or procedures may occur. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. As a result, we cannot assure you that significant deficiencies or material weaknesses in our internal control over financial reporting will not be identified in the future.

Structural and anti-takeover provisions reduce the likelihood that you will receive a takeover premium.

The Board of Directors has the authority, without shareholder approval, to issue shares of preferred stock having such rights, preferences and privileges as the Board of Directors may determine. Any such issuance of preferred stock could, under certain circumstances, have the effect of delaying or preventing a change in control and may adversely affect the rights of holders of common shares, including by decreasing the amount of earnings and assets available for distribution to holders of common shares and adversely affect the relative voting power or other rights of the holders of the common shares. In addition, we may become subject to Michigan statutes regulating business combinations which might also hinder or delay a change in control. Anti-takeover provisions that could be included in the preferred stock when issued and the Michigan statutes regulating business combinations can have a depressive effect on the market price of our common shares and can limit shareholders' ability to receive a premium on their shares by discour