

SECURITIES & EXCHANGE COMMISSION EDGAR FILING

CorMedix Inc.

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

FORM 10-K

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

For t	For the fiscal year ended: December 31, 2018			
	OR			
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECU	RITIES EXC	HANGE ACT OF 1934	
For t	For the transition period from to			
Com	Commission file number: 001-34673			
	CORMEDIX INC	.		
	(Exact name of Registrant as Speci		arter)	
	Delaware	2	20-5894890	
	(State or Other Jurisdiction ofIncorporation or Organization)	(I.R.S. Emp	loyerIdentification No.)	
	400 Connell Drive, Suite 5000, Berkeley He	eights, NJ	07922	
	(Address of Principal Executive Office		(Zip Code)	
	Registrant's telephone number, including a	rea code: <u>(9</u>	08) 517-9500	
	Securities registered pursuant to Sec	ion 12(b) of	the Act:	
	Title of each class Nam	e of each ex	change on which registered	
	Common Stock, \$0.001 Par Value	NYS	E American LLC	
Indicate Ind	ndicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rundicate by check mark if the registrant is not required to file reports pursuant to Section 1 ndicate by check mark whether the registrant: (1) has filed all reports required to be filed the preceding 12 months (or for such shorter period that the registrant was required to file the past 90 days. Yes ☒ No ☐ ndicate by check mark whether the registrant has submitted electronically every Interaction Regulation S-T during the preceding 12 months (or for such shorter period that the registrant dicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation the registrant's knowledge, in definitive proxy or information statements incorporated by respectively. ☐ ndicate by check mark whether the registrant is a large accelerated filer, an accelerated emerging growth company. See the definitions of "large accelerated filer," "accelerated Rule 12b-2 of the Exchange Act:	3 or Section by Section 1 e such reports ve Data File rant was requ ns S-K is not eference in F	3 or 15(d) of the Act. Yes □ No ☒ 3 or 15(d) of the Securities Exchange Act of 1934 of s), and (2) has been subject to such filing requirem required to be submitted pursuant to Rule 405 of uired to submit such files). Yes ☒ No □ t contained herein, and will not be contained, to the Part III of this Form 10-K or any amendment to this	ents for best of Form
Larg	_arge accelerated filer □ Accelerate	ed filer □		
Non-	Non-accelerated filer ⊠ Smaller re	porting comp	pany ⊠	
Eme	Emerging growth company □			
	f an emerging growth company, indicate by check mark if the registrant has elected not to revised financial accounting standards provided pursuant to Section 13(a) of the Exchange		tended transition period for complying with any new	s or
Indic	ndicate by check mark whether the registrant is a shell company (as defined in Rule 12b	-2 of the Act)). Yes □ No ⊠	
com	The aggregate market value of the registrant's voting common equity held by non-affile common stock on the last business day of the registrant's most recently completed second this calculation, shares held by directors and executive officers of the registrant have be	nd fiscal quai	rter was approximately \$19.2 million. Solely for the	-

DOCUMENTS INCORPORATED BY REFERENCE

The number of outstanding shares of the registrant's common stock was 119,014,093 as of March 12, 2019.

CORMEDIX INC.

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Neutrolin® is our registered trademark. All other trade names, trademarks and service marks appearing in this report are the property of their respective owners. We have assumed that the reader understands that all such terms are source-indicating. Accordingly, such terms, when first mentioned in this report, appear with the trade name, trademark or service mark notice and then throughout the remainder of this report without trade name, trademark or service mark notices for convenience only and should not be construed as being used in a descriptive or generic sense.

PARTI

Forward-Looking Statements

This report contains "forward-looking statements" that involve risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. The statements contained in this report that are not purely historical are 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"). Forward-looking statements are often identified by the use of words such as, but not limited to, "anticipate," "believe," "can," "continue," "could," "estimate," "expect," "intend," "may," "will," "plan," "project," "seek," "should," "target," "will," "would," and similar expressions or variations intended to identify forward-looking statements. These statements are based on the beliefs and assumptions of our management based on information currently available to management. Such forward-looking statements are subject to risks, uncertainties and other important factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below in the section titled "Item 1A. Risk Factors." Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Item 1. Business

Overview

We are a biopharmaceutical company focused on developing and commercializing therapeutic products for the prevention and treatment of infectious and inflammatory diseases.

Our primary focus is on the development of our lead product candidate, Neutrolin®, for potential commercialization in the United States, or U.S., and other key markets. We have in-licensed the worldwide rights to develop and commercialize Neutrolin. Neutrolin is a novel anti-infective solution (a formulation of taurolidine 1.35%, citrate 3.5%, and heparin 1000 u/ml) intended for the reduction and prevention of catheter-related infections and thrombosis in patients requiring central venous catheters in clinical settings such as dialysis, critical/intensive care, and oncology. Infection and thrombosis represent key complications among dialysis, critical care/intensive care and cancer patients with central venous catheters. These complications can lead to treatment delays and increased costs to the healthcare system when they occur due to hospitalizations, need for IV antibiotic treatment, long-term anticoagulation therapy, removal/replacement of the central venous catheter, related treatment costs and increased mortality. We believe Neutrolin addresses a significant unmet medical need and a potential large market opportunity.

Neutrolin - United States

The U.S. Food and Drug Administration, or FDA, has designated Neutrolin as a Qualified Infectious Disease Product, or QIDP, for prevention of catheter related blood stream infections in patients with end stage renal disease receiving hemodialysis through a central venous catheter. Catheter-related blood stream infections and clotting can be life-threatening. The QIDP designation provides five years of market exclusivity in addition to the five years granted for a New Chemical Entity. In addition, in January 2015, the FDA granted Fast Track designation to Neutrolin Catheter Lock Solution, highlighting the large unmet need to prevent infections in the U.S. healthcare system. The Fast Track designation of Neutrolin provides us with the opportunity to meet with the FDA on a more frequent basis during the development process, and also ensures eligibility to request priority review of the marketing application.

In late 2013, we met with the FDA to determine the pathway for U.S. marketing approval of Neutrolin. We launched the Phase 3 clinical trial in hemodialysis catheters in the U.S. in December 2015. The clinical trial, named Catheter Lock Solution Investigational Trial, or LOCK-IT-100, was a prospective, multicenter, randomized, double-blind, active control trial which aimed to demonstrate the efficacy and safety of Neutrolin in preventing catheter-related bloodstream infections, or CRBSI, in subjects receiving hemodialysis therapy as treatment for end stage renal disease. The primary endpoint for the trial was time to CRBSI. The trial evaluated whether Neutrolin was superior to the active control heparin by documenting the incidence of CRBSI and the time until the occurrence of CRBSI. Secondary endpoints were catheter patency, which is defined as required use of tissue plasminogen activating factor (tPA), or removal of catheter for any reason. On July 25, 2018, we announced that the independent Data Safety Monitoring Board ("DSMB") had completed its review of the interim analysis of the data from the LOCK-IT-100 study and, because the pre-specified level of statistical significance was reached and efficacy had been demonstrated, the DSMB recommended the study be terminated early. No safety concerns were reported by the DSMB based on the interim analysis.

We established the Clinical Adjudication Committee, or CAC, to critically and independently assess CRBSI. As announced in July 2018, the CAC reviewed potential cases of CRBSI in our LOCK-IT-100 study that occurred through early December 2017, and identified 28 such cases. As previously agreed with the FDA, an interim efficacy analysis was performed when the first 28 CRBSIs were identified. In late January 2019, we announced the topline results of the full data set of the LOCK-IT-100 study. Because the study continued enrolling and treating subjects until study termination, the final efficacy analysis was based on a total of 795 subjects.

The primary endpoint of the Phase 3 LOCK-IT-100 study was the reduction of the risk of occurrence of CRBSI by Neutrolin relative to the active control of heparin. In the analysis of the full data set, a total of 41 CRBSI events were determined by the CAC. There was a 71% reduction in the risk of occurrence of CRBSIs compared with the active control of heparin, which is well in excess of the study's assumed treatment effect size of a 55% reduction. In the Neutrolin arm, the CRBSI event rate was 0.13 per 1000 catheter days, which is significantly lower than the event rate of 0.46 per 1000 catheter days in the control arm. The statistical significance of the primary endpoint in the full data set (p=0.0006) was even more impressive than that of the interim analysis (p=0.0034).

There were no statistically significant differences between the results in the Neutrolin arm compared with the control arm in the final analysis for the secondary endpoints. The event rate for one of the secondary endpoints, catheter removal for any reason, was 3.48 per 1,000 catheter-days (236 out of 397 subjects) in the Neutrolin arm and 3.23 per 1,000 catheter-days (224 out of 398 subjects) in the control arm (p=0.39). The loss of catheter patency, which was defined either as catheter removal due to loss of catheter patency or the administration of tissue plasminogen activating factor (tPA), was also a secondary endpoint. The event rate for loss of catheter patency was 1.01 per 1,000 catheter-days (64 out of 397 subjects) in the Neutrolin arm and 0.74 per 1,000 catheter-days (48 out of 398 subjects) in the control arm (p=0.10).

In the top-line safety analysis, the observed rate of treatment-emergent adverse events was lower in the Neutrolin arm. The rate of adverse events per patient was 5.1 in the Neutrolin arm and 5.8 in the control arm.

Although two pivotal clinical trials to demonstrate safety and effectiveness of Neutrolin would generally be required by the FDA to secure marketing approval in the U.S., based on the recently completed and unblinded topline results of the LOCK-IT-100 study, we have begun discussions with the FDA on the appropriate next steps to support regulatory approval for Neutrolin. We agreed to provide the FDA a detailed analysis of the full data set including secondary endpoints from the LOCK-IT-100 study to facilitate FDA's consideration of our request to file the New Drug Application ("NDA") for Neutrolin on the basis of the LOCK-IT-100 study results. These data became available following the locking and unblinding of the study data in late January 2019. The analysis is planned to be completed over the next several weeks. We can provide no assurances that the FDA will not require a second clinical trial prior to NDA submission for Neutrolin.

The FDA also agreed that we could request consideration of Neutrolin for approval under the Limited Population Pathway for Antibacterial and Antifungal Drugs, or LPAD. LPAD, passed as part of the 21st Century Cures Act, is a new program intended to expedite the development of drug products which allows for the FDA's determination of safety and effectiveness to reflect the risk-benefit profile of the drug in the intended limited population, taking into account the severity, rarity, or prevalence of the infection and the availability of alternative treatments in the limited population.

Neutrolin – International

In July 2013, we received CE Mark approval for Neutrolin. In December 2013, we commercially launched Neutrolin in Germany for the prevention of CRBSI, and maintenance of catheter patency in hemodialysis patients using a tunneled, cuffed central venous catheter for vascular access. To date, Neutrolin is registered and may be sold in certain European Union and Middle Eastern countries for such treatment.

In September 2014, the TUV-SUD and The Medicines Evaluation Board of the Netherlands, or MEB, granted a label expansion for Neutrolin for these same expanded indications for the European Union ("EU"). In December 2014, we received approval from the Hessian District President in Germany to expand the label to include use in oncology patients receiving chemotherapy, IV hydration and IV medications via central venous catheters. The expansion also adds patients receiving medication and IV fluids via central venous catheters in intensive or critical care units (cardiac care unit, surgical care unit, neonatal critical care unit, and urgent care centers). An indication for use in total parenteral nutrition was also approved.

Additional Development Possibilities

We are evaluating opportunities for the possible expansion of taurolidine as a platform compound. Patent applications have been filed in wound closure, surgical meshes, wound management, and osteoarthritis, including visco-supplementation. We have had dialogue with the FDA on the regulatory pathway for these indications. The FDA has recently informed us that because taurolidine is an unapproved drug, there is no appropriate predicate device currently marketed in the U.S. on which a 510(k) approval process could be based. As a result, we will be required to submit a premarket approval application, or PMA, for marketing authorization for these indications. In the event that the NDA for Neutrolin is approved by the FDA, the regulatory pathway for these other indications may be revisited with the FDA. Although there will presumably still be no appropriate predicate, *de novo* Class II designation can be proposed, based on a risk assessment and a reasonable assurance of safety and effectiveness. We believe taurolidine can also provide benefits not currently available in marketed antimicrobial medical devices, devices for burn victims and use in less sterile environments.

We are also involved in a pre-clinical research collaboration for the use of taurolidine in combination with certain anti-cancer drugs as a possible treatment for rare orphan pediatric tumors. In February 2018, the FDA granted orphan drug designation to taurolidine for the treatment of neuroblastoma.

Neutrolin

Market Opportunity

Central venous catheters and peripherally inserted central catheters ("Central Catheters") are an important and frequently used method for accessing the vasculature in hemodialysis (a form of dialysis where the patient's blood is circulated through a dialysis filter), administering chemotherapy and basic fluids (total parenteral nutrition) in cancer patients and for cancer chemotherapy, long term antibiotic therapy, total parenteral nutrition (complete or partial dietary support via intravenous nutrients) and critical care/intensive care patients.

According to the 2015 United States Renal Disease System, there were 660,000 patients on hemodialysis in the U.S. Hemodialysis National Kidney Foundation has reported that patients requiring Central Catheters represent over 63 million catheter/dialysis treatment days per year. In the United States, 5.7 million intensive care patients are admitted annually according to the Society of Critical Care Medicine, which is estimated to represent 28.5 million catheter days associated with Central Catheter use in the ICU alone. As of 2014, there were over 14.5 million patients in the United States living with cancer, with an estimated 7.7 million having had long-term Central Catheters. When stages of disease and types of chemotherapy regime are considered, the number of catheter days per year in cancer patients reaches 90 million.

One of the major and common complications for all patients requiring central venous catheters is CRBSI and the clinical complications associated with them. There are an estimated 250,000 CRBSI each year. The U.S. Centers for Disease Control and Prevention stated in the Journal of American Medicine that the total annual cost in the United States of treating all CRBSI episodes and their complications amounts to approximately \$6.0 billion.

Biofilm build up is the pathogenesis of both infections and thrombotic complications in central venous catheters. Prevention of CRBSI and inflammatory complications requires both decontamination of the internal surface of the catheter to prevent the systemic dissemination of organisms contained within the biofilm as well as an anticoagulant to retain patency. Biofilm forms when bacteria adhere to surfaces in aqueous environments and begin to excrete a slimy, glue-like substance that can anchor them to various types of materials, including intravenous catheters. The presence of biofilm has many adverse effects, including the ability to release bacteria into the blood stream. The current standard of catheter care is to instill a heparin lock solution at a concentration of 1,000 u/mL into each catheter lumen immediately following treatment, in order to prevent clotting between dialysis treatments. However, a heparin lock solution provides no protection from the risk of infection.

Currently, there are no pharmacologic agents approved in the U.S. for the prevention of CRBSI in central venous catheters. As noted above, we received the CE Mark approval for Neutrolin from the MEB of the EU in July 2013. We believe there is a significant need for prevention of CRBSI in the hemodialysis patient population as well as for other patient populations utilizing central venous catheters and peripherally inserted central catheters, such as oncology/chemotherapy, total parenteral nutrition and intensive care unit patients.

Neutrolin is a broad-spectrum antimicrobial/antifungal and anticoagulant combination that is active against common microbes including antibiotic-resistant strains and in addition may prevent biofilm formation. We believe that using Neutrolin as an anti-infective solution will significantly reduce the incidence of catheter-related blood stream infections, thus reducing the need for local and systemic antibiotics while prolonging catheter life.

Initially, we expect to sell Neutrolin in the U.S. primarily to key dialysis center operators. We anticipate that Medicare reimbursement could be available for Neutrolin in hemodialysis and other catheter indications in intensive care, oncology and total parenteral nutrition through relevant hospital inpatient diagnosis-related groups (DRGs) or outpatient ambulatory payment classifications (APCs), the End-Stage Renal Disease Prospective Payment System (ESRD PPS) base payment, or under the Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS) Fee Schedule, depending on the setting of care. We also plan to seek separate reimbursement as a drug, where available under Medicare, through mechanisms such as pass-through status under the Hospital Outpatient Prospective Payment System, the transitional drug add-on payment adjustment under the ESRD PPS, or reimbursement as a drug used with a DMEPOS infusion pump. We cannot fully anticipate changes in reimbursement requirements and mechanisms in the coming years, however, and we cannot be certain that Neutrolin will be granted separate reimbursement under any of these mechanisms. Furthermore, we anticipate that the U.S. Centers for Medicare & Medicaid Services (CMS), and private payers will increasingly demand that manufacturers demonstrate the cost effectiveness of their product as part of the reimbursement review and approval process. With this in mind, we are performing health economic evaluations to support this review in the context of the prospective use of Neutrolin in dialysis, the ICU and oncology settings. Our studies may not be sufficient to support coverage or reimbursement at levels that allow providers to use Neutrolin.

Competitive Landscape

The drug and medical device industries are highly competitive and subject to rapid and significant technological change. Neutrolin's current and future competitors include large as well as specialty pharmaceutical and biotechnology companies. Many of our competitors have substantially greater financial, technical and human resources than we do and significantly more experience in the development and commercialization of drugs and medical devices. Further, the development of new treatment methods could render Neutrolin non-competitive or obsolete.

We believe that the key competitive factors that will affect the development and commercial success of Neutrolin are efficacy and safety, as well as pricing and reimbursement. Given that there are no approved catheter lock solutions with anti-microbial properties in the U.S., and that the current standard of care is heparin, we believe there is an opportunity for Neutrolin to become the new standard of care in the U.S. market, if approved.

Drug:

To the best of our knowledge, the following product candidates have been recognized for the prevention and treatment of catheter-related blood stream infections in the U.S. or elsewhere.

- TauroLock, manufactured by Tauro-Implant (Winsen, Germany). TauroLock has received a CE Mark and is distributed in 25 countries. It has antimicrobial and anti-coagulant activity and contains a combination of citrate 4% with (cyclo)-taurolidine and heparin or urokinase. TauroLock has four formulations: TauroLock, Tauro_lock Heparin 100, TauroLock Heparin 500 and TauroLock Urokinase 2500IU. None of these formulations is approved for use in the U.S.
- Zuragen by Ash Access Technology (Lafayette, IN), has antimicrobial and anticoagulant activity and contains methylene blue, parabens and 7% citrate.
 Clinicaltrials.gov most recently reported status as not yet recruiting subjects as of October 2014.
- B-Lock by Great Lakes Pharmaceuticals Inc. (Cleveland, OH). It has anti-microbial, anti-coagulant and anti-fungal activity and contains trimethoprim, EDTA and ethanol combinations. B-Lock initiated a study in 2012 in Poland and Hungary to support CE Mark in European Union. Clinicaltrials.gov reported the study as terminated for failure to meet primary endpoint in February 2017.
- DuraLock-C, manufactured by Medical Components, Inc. (Harleysville, PA). DuraLock-C received a CE Mark and is distributed in a number of European Union countries. It has anti-microbial and anti-thrombosis activity and contains trisodium citrate in 46.7%, 30% and 4% concentrations. No clinical update has been provided for this product on Clinicaltrials.gov since March 2008. This product has not been approved for use in the U.S. market.
- IntraLock, manufactured by Fresenius Medical Care AG & Co. (Bad Homburg, Germany). IntraLock received a CE Mark and is distributed in a number of European Union countries. It is an anticoagulant solution to prevent thrombus formation in catheters. IntraLock contains citrate (4%) for anticoagulation and a small amount of polyhexanide for preservation. This product has not been approved for use in the U.S. market.

- TauroSept, manufactured by Geistlich Pharma (Wolhusen, Switzerland). TauroSept received Class 3 CE Mark and is distributed in a number of European Union countries. TauroSept contains 2% taurolidine solution, 5% polyvinylpyrrolidone and traces of HCl and NaOH to adjust pH. It contains no anticoagulant substances. This product has not been approved for use in the U.S. market.
- Mino-Lok, being developed by Citius Pharmaceutical (Cranford, NJ). Mino-Lok is intended to salvage the central venous catheter obviating the need to remove and replace the catheter. Mino-Lok contains a proprietary combination of minocycline, edetate (disodium EDTA), and ethyl alcohol. This product is in Phase 3 development in the U.S.

Medical Devices:

- Tego® Needlefree Connector, manufactured by ICU Medical Inc. (San Clemente, CA). Tego Needlefree Connector received 510(k) clearance from the FDA. The Tego connector creates a mechanical and microbiology closed system when attached to the hub of the catheter and works with all hemodialysis central venous catheter, or CVC, related applications.
- Curos® (Luer-lock caps twist on, stay on) disinfecting port protectors designed specifically for Tego Needlefree Connectors, manufactured by Ivera Medical Corporation (San Diego, CA). Curos received 510(k) clearance from the FDA. Curos for Tego Needlefree Connectors contains 70% isopropyl alcohol-saturated, sponge-like foam that disinfects ports in three minutes and keeps ports clean for seven days.
- ClearGuard® HD End Caps for Hemodialysis Catheters, manufactured by Pursuit Vascular, Inc. (Maple Grove, MN). ClearGuard HD End Caps received 510(k) clearance from the FDA. The ClearGuard HD End Cap consists of (1) a copolyester polymer plug, which has a rod extending from the tier region that is coated with the antimicrobial agent chlorhexidine acetate (CHA) and (2) a nylon lock ring with threads that are also coated with CHA.
- BioFlo DuraMax Dialysis Catheter with Endexo Technology, manufactured by AngioDynamics (Latham, NY). The product received 510(k) clearance by the FDA. The BioFlo DuraMax chronic dialysis catheter features Endexo Technology, a catheter material more resistant to thrombus accumulation. Endexo technology is permanent, non-eluting polymer "blended" into the polyurethane from which the catheter is made.

Some device companies have launched antibiotic or antimicrobial-coated catheters as short-term prevention of catheter infection. We believe these are not effective for hemodialysis catheters due to the long-term use and high blood flow associated with hemodialysis.

Manufacturing

All of our manufacturing processes currently are, and we expect them to continue to be, outsourced to third parties. We rely on third-party manufacturers to produce sufficient quantities of drug product for use both commercially and in clinical trials. We intend to continue this practice in the future.

In April 2015, we entered into a Preliminary Services Agreement with [RC] 2 Pharma Connect LLC ("RC2"), pursuant to which RC2 coordinates certain manufacturing services related to taurolidine, which is a key ingredient in Neutrolin. Specifically, RC2 undertook a critical parameters evaluation for our manufacturing needs and to coordinate the cGMP processes set forth in the agreement that we believe are necessary for the submission of our planned new drug application for Neutrolin to the FDA, as well as any foreign regulatory applications. The total cost for RC2's services under the preliminary services agreement was approximately \$1.8 million and the agreement was completed during the first quarter of 2017. The active pharmaceutical ingredient, or API, produced under this agreement has been manufactured for future commercial sales in the EU, Middle East and the U.S. The API was used for the U.S. Phase 3 clinical trial. Further, CorMedix has a Drug Master File filed with FDA for taurolidine.

We are confident that there exists a sufficient number of potential alternate sources for the drug substances required to produce our products, as well as third-party manufacturers, that we will be able to find alternate suppliers and third-party manufacturers in the event that our relationship with any supplier or third-party manufacturer deteriorates.

United States Government Regulation

The research, development, testing, manufacture, labeling, promotion, advertising, distribution, and marketing, among other things, of our products are extensively regulated by governmental authorities in the United States and other countries. Our products may be classified by the FDA as a drug or a medical device depending upon the indications for use or claims. Because certain of our product candidates are considered as medical devices and others are considered as drugs for regulatory purposes, we intend to submit applications to regulatory agencies for approval or clearance of both medical devices and pharmaceutical product candidates.

In the United States, the FDA regulates drugs and medical devices under the Federal Food, Drug, and Cosmetic Act and the agency's implementing regulations. If we fail to comply with the applicable United States requirements at any time during the product development process, clinical testing, and during the approval process or after approval, we may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, warning letters, adverse publicity, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution, among other actions. Any agency enforcement action and/or any related impact could have a material adverse effect on us.

Drug Approval Process

The research, development, and approval process in the United States and elsewhere is intensive and rigorous and generally takes many years to complete. The typical process required by the FDA before a therapeutic drug may be marketed in the United States includes:

- Pre-clinical laboratory and animal tests performed under the FDA's Good Laboratory Practices, or GLP, regulations;
- submission to the FDA of an investigational new drug application, or IND, which must become effective before human clinical trials may commence;
- human clinical studies to evaluate the drug's safety and effectiveness for its intended uses;
- FDA review of whether the facility in which the drug is manufactured, processed, packaged, or held meets standards designed to assure the product's
 continued quality and FDA review of clinical trial sites to determine whether the clinical trials were conducted in accordance with Good Clinical Practices,
 or GCPs; and
- submission of a new drug application, or NDA, to the FDA, and approval of the application by the FDA to allow sales of the drug.

During pre-clinical testing, studies are performed with respect to the chemical and physical properties of candidate formulations. These studies are subject to GLP requirements. Biological testing is typically done in animal models to demonstrate the activity of the compound against the targeted disease or condition and to assess the apparent effects of the new product candidate on various organ systems, as well as its relative therapeutic effectiveness and safety. An IND application must be submitted to the FDA and become effective before studies in humans may commence.

Clinical trial programs in humans generally follow a three-phase process. Typically, Phase 1 studies are conducted in small numbers of healthy volunteers or, on occasion, in patients afflicted with the target disease. Phase 1 studies are conducted to determine the metabolic and pharmacological action of the product candidate in humans and the side effects associated with increasing doses, and, if possible, to gain early evidence of effectiveness. In Phase 2, studies are generally conducted in larger groups of patients having the target disease or condition in order to validate clinical endpoints, and to obtain preliminary data on the effectiveness of the product candidate and optimal dosing. This phase also helps determine further the safety profile of the product candidate. In Phase 3, large-scale clinical trials are generally conducted in patients having the target disease or condition to provide sufficient data for the statistical proof of effectiveness and safety of the product candidate as required by United States and foreign regulatory agencies. Typically, two Phase 3 trials are required for marketing approval.

In the case of products for certain serious or life-threatening diseases, the initial human testing may be done in patients with the disease rather than in healthy volunteers. Because these patients are already afflicted with the target disease or condition, it is possible that such studies will also provide results traditionally obtained in Phase 2 studies. These studies are often referred to as "Phase 1/2" studies. However, even if patients participate in initial human testing and a Phase 1/2 study is carried out, the sponsor is still responsible for obtaining all the data usually obtained in both Phase 1 and Phase 2 studies.

Before proceeding with a study, sponsors may seek a written agreement known as a Special Protocol Assessment, or SPA, from the FDA regarding the design, size, and conduct of a clinical trial. Among other things, SPAs can cover clinical studies for pivotal trials whose data will form the primary basis to establish a product's efficacy. SPAs help establish up-front agreement with the FDA about the adequacy of a clinical trial design to support a regulatory approval, but the agreement is not binding on the FDA if new circumstances arise. An SPA may only be modified with the agreement of the FDA and the trial sponsor or if the director of the FDA reviewing division determines that a substantial scientific issue essential to determining the safety or efficacy of the drug was identified after the testing began. There is no guarantee that a study will ultimately be adequate to support an approval even if the study is subject to an SPA.

Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group regularly reviews accumulated data and advises the study sponsor regarding the continuing safety of trial subjects, and the continuing validity and scientific merit of the clinical trial. The data safety monitoring board receives special access to unblinded data during the clinical trial and may advise the sponsor to halt the clinical trial if it determined there is an unacceptable safety risk for subjects or on other grounds, such as no demonstration of efficacy.

The manufacture of investigational drugs for the conduct of human clinical trials is subject to current Good Manufacturing Practice, or cGMP, requirements. Investigational drugs and active pharmaceutical ingredients imported into the United States are also subject to regulation by the FDA relating to their labeling and distribution. Further, the export of investigational drug products outside of the United States is subject to regulatory requirements of the receiving country as well as U.S. export requirements under the Federal Food, Drug, and Cosmetic Act, or FDCA.

IND sponsors are required to submit a number of reports to the FDA during the course of a development program. For instance, sponsors are required to make annual reports to the FDA concerning the progress of their clinical trial programs as well as more frequent reports for certain serious adverse events. Sponsors must submit a protocol for each clinical trial, and any subsequent protocol amendments to the FDA. Investigators must also provide certain information to the clinical trial sponsors to allow the sponsors to make certain financial disclosures to the FDA. Information about certain clinical trials, including a description of the study and study results, must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on their clinicaltrials.gov website. Moreover, under the 21st Century Cures Act, manufacturers or distributors of investigational drugs for the diagnosis, monitoring, or treatment of one or more serious diseases or conditions must have a publicly available policy concerning expanded access to investigational drugs.

United States law requires that studies conducted to support approval for product marketing be "adequate and well controlled." In general, this means that either a placebo or a product already approved for the treatment of the disease or condition under study must be used as a reference control. The recently passed 21st Century Cures Act, however, provides for FDA acceptance of new kinds of data such as patient experience data, real world evidence, and, for appropriate indications sought through supplemental marketing applications, data summaries. Studies must also be conducted in compliance with good clinical practice requirements, and informed consent must be obtained from all study subjects.

In addition, under the Pediatric Research Equity Act, or PREA, an NDA or supplement to an NDA for a new active ingredient, indication, dosage form, dosage regimen, or route of administration must contain data that are adequate to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements.

The FDA also may require submission of a risk evaluation and mitigation strategy, or REMS, to ensure that the benefits of the drug outweigh the risks of the drug. The REMS plan could include medication guides, physician communication plans, and elements to assure safe use, such as restricted distribution methods, patient registries, or other risk minimization tools. An assessment of the REMS must also be conducted at set intervals. Following product approval, a REMS may also be required by the FDA if new safety information is discovered and the FDA determines that a REMS is necessary to ensure that the benefits of the drug outweigh the risks of the drug.

The clinical trial process for a new compound can take ten years or more to complete. The FDA may prevent clinical trials from beginning or may place clinical trials on hold at any point in this process if, among other reasons, it concludes that study subjects are being exposed to an unacceptable health risk. Trials may also be prevented from beginning or may be terminated by institutional review boards, or IRBs, who must review and approve all research involving human subjects and amendments thereto. The IRB must continue to oversee the clinical trial while it is being conducted. This includes the IRB receiving information concerning unanticipated problems involving risk to subjects. Side effects or adverse events that are reported during clinical trials can delay, impede, or prevent marketing authorization. Similarly, adverse events that are reported after marketing authorization can result in additional limitations being placed on a product's use and, potentially, withdrawal of the product from the market.

Following the completion of a clinical trial, the data are analyzed by the sponsoring company to determine whether the trial successfully demonstrated safety and effectiveness and whether a product approval application may be submitted. In the United States, if the product is regulated as a new drug, an NDA must be submitted and approved before commercial marketing may begin. The NDA must include a substantial amount of data and other information concerning the safety and effectiveness of the compound from laboratory, animal, and human clinical testing, as well as data and information on manufacturing, product quality and stability, and proposed product labeling.

Each domestic and foreign manufacturing establishment, including any contract manufacturers that we may decide to use, must be listed in the NDA and must be registered with the FDA. The application generally will not be approved until the FDA conducts a manufacturing inspection, approves the applicable manufacturing process for the drug product, and determines that the facility is in compliance with current cGMP requirements. Moreover, FDA will also typically inspect one or more clinical trial sites to confirm that the applicable clinical trials were conducted in accordance with GCPs.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, the FDA receives fees for reviewing an NDA, as well as annual fees for commercial manufacturing establishments and for approved products. These fees can be significant. Fee waivers or reductions are available in certain circumstances. One basis for a waiver of the application user fee is if the applicant employs fewer than 500 employees, including employees of affiliates, the applicant does not have an approved marketing application for a product that has been introduced or delivered for introduction into interstate commerce, and the applicant, including its affiliates, is submitting its first marketing application. Product candidates that are designated as orphan drugs, which are further described below, are also not subject to application user fees unless the application includes an indication other than the orphan indication. Under certain circumstances, orphan products may also be exempt from product and establishment fees.

Each NDA submitted for FDA approval is usually reviewed for administrative completeness and reviewability. Following this review, the FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing.

Once accepted for filing, the FDA's review of an application may involve review and recommendations by an independent FDA advisory committee. The FDA must refer applications for drugs that contain active ingredients, including any ester or salt of the active ingredients that have not previously been approved by the FDA to an advisory committee or provide in an action letter a summary for not referring it to an advisory committee. The FDA may also refer drugs to advisory committees when it is determined that an advisory committee's expertise would be beneficial to the regulatory decision-making process, including the evaluation of novel products and the use of new technology. An advisory committee is typically a panel that includes clinicians and other experts, which review, evaluate, and make a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

After evaluating the NDA and all related information, including the advisory committee recommendation, if any, and inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter, or, in some cases, a Complete Response Letter, or CRL. If a CRL is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter; withdraw the application; or request an opportunity for a hearing. A CRL indicates that the review cycle of the application is complete and the application is not ready for approval and describes all of the specific deficiencies that the FDA identified in the NDA. A CRL generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA, and may require additional clinical or pre-clinical testing in order for the FDA to reconsider the application. The deficiencies identified may be minor, for example, requiring labeling changes; or major, for example, requiring additional clinical trials. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA may issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

Even if the FDA approves a product, it may limit the approved therapeutic uses for the product as described in the product labeling, require that warning statements be included in the product labeling, require that additional studies be conducted following approval as a condition of the approval, impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a REMS or otherwise limit the scope of any approval.

Special FDA Expedited Review and Approval Programs

The FDA has various programs, including Fast Track designation, priority review and breakthrough designation, that are intended to expedite or simplify the process for the development and FDA review of certain drug products that are intended for the treatment of serious or life threatening diseases or conditions, and demonstrate the potential to address unmet medical needs or present a significant improvement over existing therapy. The purpose of these programs is to provide important new drugs to patients earlier than under standard FDA review procedures.

To be eligible for a Fast Track designation, the FDA must determine, based on the request of a sponsor, that a product is intended to treat a serious or life threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA will determine that a product will fill an unmet medical need if the product will provide a therapy where none exists or provide a therapy that may be potentially superior to existing therapy based on efficacy, safety, or public health factors. If Fast Track designation is obtained, drug sponsors may be eligible for more frequent development meetings and correspondence with the FDA. In addition, the FDA may initiate review of sections of an NDA before the application is complete. This "rolling review" is available if the applicant provides and the FDA approves a schedule for the remaining information. A Fast Track product is also eligible to apply for accelerated approval and priority review.

The FDA may give a priority review designation to drugs that are intended to treat serious conditions and, if approved, would provide significant improvements in the safety or effectiveness of the treatment, diagnosis, or prevention of serious conditions. A priority review means that the goal for the FDA is to review an application within six months, rather than the standard review of ten months under current PDUFA guidelines, of the 60-day filing date for new molecular entities.

Moreover, under the provisions of the Food and Drug Administration Safety and Innovation Act, or FDASIA, enacted in 2012, a sponsor can request designation of a product candidate as a "breakthrough therapy." A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. Drugs designated as breakthrough therapies are eligible for the Fast Track designation features as described above, intensive guidance on an efficient drug development program beginning as early as Phase 1 trials, and a commitment from the FDA to involve senior managers and experienced review staff in a proactive collaborative, cross-disciplinary review.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

A final new program to expedite the development of drug products is the LPAD, which was passed as part of the 21 st Century Cures Act. LPAD allows for the FDA's determination of safety and effectiveness to reflect the risk-benefit profile of the drug in the intended limited population, taking into account the severity, rarity, or prevalence of the infection and the availability of alternative treatments in the limited population. Under LPAD, a sponsor may request drug approval for an antibacterial or antifungal drug if the drug is intended to treat a serious life-threatening infection in a limited population of patients with unmet needs. The drug may be approved for the limited population notwithstanding a lack of evidence to fully establish a favorable benefit-risk profile in a broader population. The FDA must provide prompt advice to sponsors seeking approval under LPAD to enable them to plan a development program. If approved under LPAD, certain post-marketing requirements would apply, such as required labeling and advertising statements and pre-distribution submission of promotional materials to FDA. If after approval for a limited population, a product receives a broader approval, the FDA may remove such post-marketing restrictions. While a drug may only be approved for a limited population under this program, the 21st Century Cures Act states that it is not intended to restrict the prescribing of antimicrobial drugs or other products by healthcare professionals.

Exclusivity

For approved drug products, market exclusivity provisions under the FDCA provide periods of regulatory exclusivity, which gives the holder of an approved NDA limited protection from new competition in the marketplace for the innovation represented by its approved drug.

Section 505 of the FDCA describes three types of marketing applications that may be submitted to the FDA to request marketing authorization for a new drug. A Section 505(b)(1) NDA is an application that contains full reports of investigations of safety and efficacy. A Section 505(b)(2) NDA is an application in which the applicant, in part, relies on investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. Section 505(j) establishes an abbreviated approval process for a generic version of approved drug products through the submission of an Abbreviated New Drug Application, or ANDA. An ANDA provides for marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics, and intended use, among other things, to a previously approved product. Limited changes must be pre-approved by the FDA via a suitability petition.

Five years of exclusivity are available to New Chemical Entities, or NCEs. A NCE is a drug that contains no active moiety that has been approved by the FDA in any other NDA. An active moiety is the molecule or ion, excluding those appended portions of the molecule, that cause the drug to be an ester, salt, including a salt with hydrogen or coordination bonds, or other noncovalent derivatives, such as a complex, chelate, or clathrate, of the molecule, responsible for the therapeutic activity of the drug substance. During the exclusivity period, the FDA may not accept for review and make an ANDA or a 505(b)(2) NDA approval effective for an application submitted by another company that contains the previously approved active moiety. An ANDA or 505(b)(2) application, however, may be submitted one year before NCE exclusivity expires if the applicant submits a certification stating that the patents listed by the NCE sponsor in FDA's list of Approved Drug Products with Therapeutic Equivalence Evaluations, or Orange Book, are invalid or will not be infringed by the manufacture, use, or sale of the drug product for which approval is sought. Five-year exclusivity will also not delay the submission or approval of a full NDA; however, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the pre-clinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and efficacy.

Pediatric exclusivity is another type of non-patent marketing exclusivity in the United States and, if granted, provides for the attachment of an additional six months of marketing protection to the term of any existing regulatory exclusivity, including the non-patent exclusivity period described above. This six-month exclusivity may be granted if an NDA sponsor submits pediatric data that fairly respond to a written request from the FDA for such data. The data do not need to show the product to be effective in the pediatric population studied; rather, if the clinical trial is deemed to fairly respond to the FDA's request, the additional protection is granted. If reports of requested pediatric studies are submitted to and accepted by the FDA within the required time frames, whatever statutory or regulatory periods of exclusivity or Orange Book listed patent protection cover the drug are extended by six months. Moreover, pediatric exclusivity attaches to all formulations, dosage forms, and indications for products with existing marketing exclusivity or patent life that contain the same active moiety as that which was studied.

The Orphan Drug Act also provides incentives for the development of drugs intended to treat rare diseases or conditions, which generally are diseases or conditions affecting fewer than 200,000 individuals annually in the United States, or affecting more than 200,000 in the United States and for which there is no reasonable expectation that the cost of developing and making the drug available in the United States will be recovered from sales in the United States. Additionally, sponsors must present a plausible hypothesis for clinical superiority to obtain orphan designation if there is a drug already approved by the FDA that is intended for the same indication and that is considered by the FDA to be the same drug as the already approved drug. This hypothesis must be demonstrated to obtain orphan drug exclusivity. If granted, prior to product approval, Orphan Drug Designation entitles a party to financial incentives such as opportunities for grant funding towards clinical study costs, tax advantages, and user-fee waivers. In addition, if a product receives FDA approval for the indication for which it has orphan designation, the product is generally entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity.

For certain infectious disease products, the above discussed exclusivity periods may be further extended under the FDA's qualified infectious disease product program. A qualified infectious disease product, or QIDP, is an antibacterial or antifungal drug for human use intended to treat serious or life-threatening infections, including those caused by an antibacterial or antifungal resistant pathogen, including novel or emerging infectious pathogens; or qualifying pathogens designated by the FDA that have the potential to pose a serious threat to public health. If the FDA approves an NDA for a drug designated as a QIDP, the NCE exclusivity period is extended to ten years and the FDA may not accept applications for nine years. Moreover, if a product is designated as a QIDP and an orphan product, the orphan product exclusivity period is extended to twelve years. These extensions are in addition to any extension that an application may be entitled to under the pediatric exclusivity provisions. To receive a QIDP designation, the sponsor must request that the FDA designate the product as such prior to the submission of an NDA. This designation may not be withdrawn except if the FDA finds that the request for designation contained an untrue statement of material fact. QIDPs are also eligible for fast track status and priority review.

Post Approval Requirements

Significant legal and regulatory requirements also apply after FDA approval to market under an NDA. These include, among other things, requirements related to adverse event and other reporting, product tracking and tracing, suspect and illegitimate product investigations and notifications, product advertising and promotion and ongoing adherence to cGMPs, as well as the need to submit appropriate new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling, or manufacturing process. The FDA also enforces the requirements of the Prescription Drug Marketing Act which, among other things, imposes various requirements in connection with the distribution of product samples to physicians. The FDA enforces these requirements through, among other ways, periodic announced and unannounced facility inspections.

The FDA also strictly regulates marketing, labeling, advertising, and promotion of products that are placed on the market. A company can make only those claims relating to safety and efficacy that are approved by the FDA. Physicians, in their independent professional medical judgment, may prescribe legally available products for unapproved indications that are not described in the product's labeling and that differ from those tested and approved by the FDA. Pharmaceutical companies, however, are allowed to promote their drug products only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability, including, but not limited to, criminal and civil penalties under the FDCA and the civil False Claims Act, or FCA, exclusion from participation in federal healthcare programs, mandatory compliance programs under corporate integrity agreements, debarment, and refusal of government contracts.

The regulatory framework applicable to the production, distribution, marketing, and/or sale, of our product candidates may change significantly from the current descriptions provided herein in the time that it may take for any of our product candidates to reach a point at which a NDA is approved. Moreover, individual states may have laws and regulations that we must comply with, such as laws and regulations concerning licensing, promotion, sampling, distribution, and reporting.

Overall research, development, and approval times depend on a number of factors, including the period of review at the FDA, the number of questions posed by the FDA during review, how long it takes to respond to the FDA's questions, the severity or life-threatening nature of the disease in question, the availability of alternative treatments, the availability of clinical investigators and eligible patients, the rate of enrollment of patients in clinical trials, and the risks and benefits demonstrated in the clinical trials.

Medical Device Approval Process

In addition to our lead product candidate Neutrolin, which is subject to regulation by the FDA as a drug, we are developing other products that may be regulated as medical devices in the United States. The FDA regulates the design, development, clinical testing, manufacture, labeling, distribution, import and export, sale and promotion of medical devices. Unless an exemption applies or a product is a Class I device, all medical devices must receive either 510(k) clearance or an approved pre-market application, or PMA, from the FDA before they may be commercially distributed in the U.S. In addition, certain modifications made to marketed devices also may require 510(k) clearance or approval of a PMA supplement.

To obtain a 510(k) clearance for a device, a pre-market notification to the FDA must be submitted demonstrating that the device is substantially equivalent to a legally marketed predicate device. The FDA attempts to respond to a 510(k) pre-market notification within 90 days of submission, but as a practical matter, pre-market clearance can take significantly longer, potentially up to one year or more. The PMA process is much more demanding and uncertain than the 510(k) pre-market notification process and must be supported by extensive clinical, technical and other information, including at least one adequate and well-controlled clinical investigation. The FDA has 180 days to review an accepted PMA, although the review generally occurs over a significantly longer period of time, and can take up to several years.

The FDA has informed us that it regards taurolidine as a new chemical entity and therefore an unapproved drug. Consequently, there is no appropriate predicate device currently marketed in the U.S. on which a 510(k) approval process could be based. As a result, we will be required to submit a premarket approval application for marketing authorization for these indications. In the event that the NDA for Neutrolin is approved by the FDA, the regulatory pathway for these taurolidine product candidates can be revisited with the FDA. Although there will presumably still be no appropriate predicate, *de novo* Class II designation can be proposed, based on a risk assessment and a reasonable assurance of safety and effectiveness.

After a device is placed on the market, numerous regulatory requirements apply, including:

- Quality System Regulations, or QSRs, which require manufacturers to have a quality system for the design, manufacture, packaging, labeling, storage, installation, and servicing of finished medical devices;
- labeling regulations, which govern product labels and labeling, prohibit the promotion of products for unapproved, or off-label, uses and impose other restrictions on labeling and promotional activities;
- medical device listing and establishment registration;
- post-approval restrictions or conditions, including post-approval study commitments;
- post-market surveillance requirements;
- medical device reporting, or MDR, regulations, which require that manufacturers evaluate and investigate potential adverse events and malfunctions, and report to the FDA if their device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if it were to recur;
- regulations requiring the reporting of any device corrections or removals if the correction or removal was initiated to reduce a risk to health posed by
 the device or remedy a violation of the FDCA which may present a risk to health; and
- the FDA's recall authority, whereby it can ask, or under certain conditions order, device manufacturers to recall from the market a product that is a
 risk to health.

Our manufacturing facilities, as well as those of certain of our suppliers, are subject to periodic and for-cause inspections by the FDA and other governmental authorities to verify compliance with the QSR and other regulatory requirements.

Reimbursement and Pricing Controls

In many of the markets where we or our collaborative partners have targeted or will target Neutrolin for sale, laws control the prices charged to certain purchasers of pharmaceutical products and the prices paid by drug reimbursement programs through varying price control mechanisms. Public and private health care payors control costs and influence drug pricing through a variety of mechanisms, including through negotiating rebates with the manufacturers, limiting the reimbursement rate paid to providers, and using tiered formularies, co-payment structures that incentivize beneficiaries to request lower cost alternatives, and other mechanisms that provide preferential access to certain drugs over others within a therapeutic class. Federal and commercial payors use competition for health plan coverage and market share as leverage to obtain rebates on products they reimburse, which impacts the manufacturer's net realization on the sale of the products. These rebates may be paid on drugs sold at a mandatory discount. Additionally, federal and commercial health plans may choose to reimburse dialysis providers for dialysis services and drugs used in the provision of those services through a single bundled payment rate, which tends to make cost a more important factor for providers when making drug purchase decisions than it would otherwise be if the providers were reimbursed for drugs on a stand-alone basis. Payors also set other criteria to govern the uses of a drug that will be deemed medically appropriate and therefore reimbursed or otherwise covered. In particular, many public and private health care payors limit reimbursement and coverage to the uses of a drug that are either approved by the FDA or that are supported by other appropriate evidence (for example, published medical literature) and appear in a recognized drug compendium. Drug compendia are publications that summarize the available medical evidence for particular drug products and identify which uses of a drug are supported or not supported by the ava

Foreign Regulatory Requirements

We and our collaborative partners may be subject to widely varying foreign regulations, which may be quite different from those of the FDA, governing clinical trials, manufacture, product registration and approval, and pharmaceutical sales. Whether or not FDA approval has been obtained, we or our collaboration partners must obtain a separate approval for a product by the comparable regulatory authorities of foreign countries prior to the commencement of product marketing in those countries. In certain countries, regulatory authorities also establish pricing and reimbursement criteria. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval. In addition, under current United States law, there are restrictions on the export of products not approved by the FDA, depending on the country involved and the status of the product in that country.

International sales of medical devices manufactured in the U.S. that are not approved by the FDA for use in the U.S., or are banned or deviate from lawful performance standards, are subject to FDA export requirements. Exported devices are subject to the regulatory requirements of each country to which the device is exported. Some countries do not have medical device regulations, but in most foreign countries, medical devices are regulated. Frequently, regulatory approval may first be obtained in a foreign country prior to application in the U.S. to take advantage of differing regulatory requirements. Most countries outside of the U.S. require that product approvals be recertified on a regular basis, generally every five years. The recertification process requires that we evaluate any device changes and any new regulations or standards relevant to the device and conduct appropriate testing to document continued compliance. Where recertification applications are required, they must be approved in order to continue selling our products in those countries.

In the European Union, in order for our product candidates to be marketed and sold, we are required to comply with the Medical Devices Directive and obtain CE Mark certification. The CE Mark certification encompasses an extensive review of our quality management system which is inspected by a notified body's auditor as part of a Stage 1 and 2 International Organization for Standardization, or ISO, 13485:2003 audit, in accordance with worldwide recognized ISO standards and applicable European Medical Devices Directives for quality management systems for medical device manufacturers. Once the quality management system and design dossier has been successfully audited by a notified body and reviewed and approved by a competent authority, a CE certificate for the medical device will be issued. We are also required to comply with other foreign regulations such as the requirement that we obtain Ministry of Health, Labor and Welfare approval before we can launch new products in Japan. The time required to obtain these foreign approvals to market our products may vary from U.S. approvals, and requirements for these approvals may differ from those required by the FDA.

Medical device laws and regulations are in effect in many of the countries in which we may do business outside the United States. These laws and regulations range from comprehensive device approval requirements for our medical device product to requests for product data or certifications. The number and scope of these requirements can be complex and could increase. We may not be able to obtain or maintain regulatory approvals in such countries and we may be required to incur significant costs in obtaining or maintaining our foreign regulatory approvals. In addition, the export of certain of our products which have not yet been cleared for domestic commercial distribution may be subject to FDA export restrictions. Any failure to obtain product approvals in a timely fashion or to comply with state or foreign medical device laws and regulations may have a serious adverse effect on our business, financial condition or results of operations.

Intellectual Property

On January 30, 2008, we entered into a License and Assignment Agreement, or the NDP License Agreement, with ND Partners, LLC, or NDP. Pursuant to the NDP License Agreement, NDP granted us exclusive, worldwide licenses for certain antimicrobial catheter lock solutions, processes for treating and inhibiting infections, a biocidal lock system and a taurolidine delivery apparatus, and the corresponding United States and foreign patents and applications (the "NDP Technology"). We acquired such licenses and patents through our assignment and assumption of NDP's rights under certain separate license agreements by and between NDP and Dr. Hans-Dietrich Polaschegg, Dr. Klaus Sodemann, and Dr. Johannes Reinmueller. NDP also granted us exclusive licenses, with the right to grant sublicenses, to use and display certain trademarks in connection with the NDP Technology. As consideration in part for the rights to the NDP Technology, we paid NDP an initial licensing fee of \$325,000 and granted NDP an equity interest in our company consisting of 365,534 shares of common stock as of December 31, 2010. In addition, we are required to make payments to NDP upon the achievement of certain regulatory and sales-based milestones. Certain of the milestone payments are to be made in the form of shares of common stock currently held in escrow for NDP, and other milestone payments are to be paid in cash. The maximum aggregate number of shares issuable upon achievement of milestones and the number of shares held in escrow is 145,543 shares of common stock. The maximum aggregate amount of cash payments upon achievement of milestones is \$3,000,000 with \$2,500,000 remaining at December 31, 2018. Events that trigger milestone payments include but are not limited to the reaching of various stages of regulatory approval processes and certain worldwide net sales amounts.

On April 11, 2013, we entered into an amendment to the NDP License Agreement. Under Article 6 of the NDP License Agreement, we were obligated to make a milestone payment of \$500,000 to NDP upon the first issuance of a CE Mark for a licensed product, which payment was payable to NDP within 30 days after such issuance. Pursuant to the terms of the amendment, we and NDP agreed to delay such milestone payment to a time, to be chosen by us, anytime within twelve months after the achievement of such issuance. As consideration for the amendment, we issued NDP a warrant to purchase 125,000 shares of our common stock at an exercise price of \$1.50 per share. The warrant was exercisable immediately upon issuance and had a term of five years and expired in April 2018.

During the year ended December 31, 2013, a milestone payment of \$500,000 was earned by NDP upon the first issuance of the CE Mark for Neutrolin, which was converted in January 2014 into 50,000 Series C-3 non-voting preferred stock and 250,000 warrants at an exercise price of \$1.50 per share. During the year ended December 31, 2014, a certain milestone was achieved resulting in the release of 36,386 shares held in escrow. The number of shares held in escrow as of December 31, 2018 is 109,157 shares of common stock. There were no milestones achieved in 2017 or 2018.

The NDP License Agreement will expire on a country-by-country basis upon the earlier of (i) the expiration of the last patent claim under the NDP License Agreement in a given country, or (ii) the payment of all milestone payments and release of all shares of our common stock held in escrow under the NDP License Agreement. Upon the expiration of the NDP License Agreement in each country, we will have an irrevocable, perpetual, fully paid-up, royalty-free exclusive license to the NDP Technology in such country. The NDP License Agreement also may be terminated by NDP if we materially breach or default under the NDP License Agreement and that breach is not cured within 60 days following the delivery of written notice to us, or by us on a country-by-country basis upon 60 days prior written notice. If the NDP License Agreement is terminated by either party, our rights to the NDP Technology will revert back to NDP.

We believe that the patents and patent applications we have licensed pursuant to the NDP License Agreement cover effective solutions to the various problems discussed previously when using taurolidine in clinical applications, and specifically in hemodialysis applications. The patent portfolio licensed from NDP consists of 11 issued U.S. patents, 1 pending U.S. patent application, 14 issued foreign patents and 1 pending foreign patent application. We intend to file additional patent applications to cover any additional related subject matter we develop. We currently have 12 U.S. non-provisional patent applications, 3 U.S. provisional patent applications, 6 international (PCT) patent applications, and 34 foreign patent applications pending which cover additional applications using taurolidine in, among others, sutures, hydrogels, meshes, transdermal and biofilm products.

Employees

As of March 10, 2019, we had twenty-two full time employees, including our customer service representative and office manager in Germany. We also engage various consultants and contractors for project management and research and development, manufacturing and regulatory development, marketing, financing, sales and marketing and administrative activities.

Corporate Information

We were organized as a Delaware corporation on July 28, 2006 under the name "Picton Holding Company, Inc." and we changed our corporate name to "CorMedix Inc." on January 18, 2007. Our principal executive offices are located at 400 Connell Drive, Suite 5000, Berkeley Heights, New Jersey 07922. Our telephone number is (908) 517-9500.

We have announced our intention to effect a 1-for-5 reverse stock split to be effective on March 26, 2019 and we have not given effect to the proposed reverse stock split in this Report.

We maintain a website at www.cormedix.com; however, the information on, or that can be accessed through, our website is not part of this report. This report and all of our filings under the Exchange Act, including copies of annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, are available free of charge through our website on the date we file those materials with, or furnish them to, the Securities and Exchange Commission (the "SEC"). Such filings are also available to the public on the internet at the SEC's website at www.sec.gov. The public may also read and copy any document that we file at the SEC's Public Reference Room located at 100 F Street, NE, Washington, DC 20549 on official business days during the hours of 10 a.m. to 3 p.m. For further information on the Public Reference Room, the public is instructed to call the SEC at 1-800-SEC-0300.

Risks Related to Our Financial Position and Need for Additional Capital

We have a history of operating losses, expect to incur additional operating losses in the future and may never be profitable.

Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in the early stages of operation. We incurred net losses of approximately \$26.8 million and \$33.0 million for the years ended December 31, 2018 and 2017, respectively. As of December 31, 2018, we had an accumulated deficit of approximately \$179.0 million. We expect to incur substantial additional operating expenses over the next several years as our research, development, pre-clinical testing, clinical trial and commercialization activities increase as we develop and commercialize Neutrolin and our other product candidates. As a result, we expect to experience negative cash flow as we fund our operating losses and capital expenditures. The amount of future losses and when, if ever, we will achieve profitability are uncertain. Neutrolin was launched in December 2013 and is currently available for distribution in certain European Union and Middle East countries. We have not generated any significant commercial revenue and do not expect to generate substantial revenues from Neutrolin unless and until it is approved by the FDA and launched in the U.S. market, and we might never generate significant revenues from the sale of Neutrolin or any other products. Our ability to generate revenue and achieve profitability will depend on, among other things, the following: obtaining FDA approval of Neutrolin for hemodialysis catheters; successfully launching and marketing Neutrolin in the U.S., if approved by the FDA; successfully marketing Neutrolin in foreign countries in which it is approved for sale; obtaining necessary regulatory approvals for our other product candidates from the FDA and, if sought, international regulatory agencies; establishing manufacturing, sales, and marketing arrangements, either alone or with third parties; and raising sufficient funds to finance our activities. We might not succeed at any of these undertakings. If we are unsuccessful at some or all of these under

Our cost of operations could increase significantly more than what we expect depending on the costs to complete our development program for Neutrolin.

Our operations are subject to a number of factors that can affect our operating results and financial condition. Such factors include, but are not limited to: the results of clinical testing and trial activities of our product candidates; the ability to obtain regulatory approval to market our products; ability to manufacture successfully; competition from products manufactured and sold or being developed by other companies; the price of, and demand for, our products; our ability to negotiate favorable licensing or other manufacturing and marketing agreements for our products; and our ability to raise capital to support our operations.

To date, our commercial operations have not generated sufficient revenues to enable profitability. As of December 31, 2018 we had an accumulated deficit of \$179.0 million, and incurred net losses from operations of \$26.8 million for the year then ended. Based on the current development plans for Neutrolin in both the U.S. and foreign markets (including the recently concluded hemodialysis Phase 3 clinical trial in the U.S.) and our other operating requirements, management believes that the existing cash at December 31, 2018 plus funding raised through March 8, 2019, will be sufficient to fund operations into the second quarter of 2020. We will need additional funding for the second Phase 3 clinical trial, if required by the FDA, and funding for the commercialization of Neutrolin upon FDA approval.

Our continued operations will ultimately depend on our ability to raise additional capital through various potential sources, such as equity and/or debt financings, strategic relationships, or out-licensing of our products in order to complete the development of Neutrolin and until we achieve profitability, if ever. We can provide no assurances that such financing or strategic relationships will be available on acceptable terms, or at all. Without this funding, we could be required to delay, scale back or eliminate some or all of our research and development programs which would likely have a material adverse effect on our business.

We will need to finance our future cash needs through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements. Any additional funds that we obtain may not be on terms favorable to us or our stockholders and may require us to relinquish valuable rights.

We have launched Neutrolin in certain European Union and Middle East countries, but to date have no other approved product on the market and have not generated significant product revenue from Neutrolin to date. Unless and until we receive applicable regulatory approval for Neutrolin in the U.S., we cannot sell Neutrolin in the U.S. Therefore, for the foreseeable future, we will have to fund all of our operations and capital expenditures from Neutrolin sales in Europe and other foreign markets, if approved, cash on hand, additional financings, licensing fees and grants.

We believe that our cash resources as of December 31, 2018 plus funding raised through March 8, 2019, will be sufficient to fund operations into the second quarter of 2020. We will need additional funding thereafter to prepare for Neutrolin's commercial launch, or if required by the FDA, to undertake a second Phase 3 study prior to filing an NDA. If we are unable to raise additional funds when needed, we may not be able to complete the Neutrolin development program or commercialize Neutrolin and we could be required to delay, scale back or eliminate some or all of our research and development programs. We can provide no assurances that any financing or strategic relationships will be available to us on acceptable terms, or at all. We expect to continue to use significant cash to fund our operations as we seek FDA approval of Neutrolin in the U.S., commercialize Neutrolin in Europe and other markets, pursue development of our medical devices and other business development activities, and incur additional legal costs to defend our intellectual property.

To raise needed capital, we may sell additional equity or debt securities, obtain a bank credit facility, or enter into a corporate collaboration or licensing arrangement. The sale of additional equity or debt securities, if convertible, could result in dilution to our stockholders. The incurrence of indebtedness would result in fixed obligations and could also result in covenants that would restrict our operations. Raising additional funds through collaboration or licensing arrangements with third parties may require us to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or to grant licenses on terms that may not be favorable to us or our stockholders.

Until the date that none of the preferred stock or warrants that we issued to Elliott Associates, L.P. and Elliott International, L.P in November 2017 as part of the backstop financing are outstanding, we are prohibited from issuing or selling any securities convertible into common stock at a conversion price of below \$0.162 per share on terms more favorable than the backstop financing terms and with a conversion, exchange or exercise price that is based upon and/or varies with the trading prices of or quotations for the shares of our common stock or that is subject to being reset at some future date or upon the occurrence of specified or contingent events directly or indirectly related to our business (other than pursuant to a customary "weighted average" anti-dilution provision) or the market for our common stock or enter into any agreement to sell securities at a future determined price (other than standard and customary "preemptive" or "participation" rights and other than pursuant to an at-the-market offering through a registered broker-dealer). Under certain conditions, this restriction could make raising capital through the sale of equity securities difficult and could have a material adverse impact on our business, financial condition and prospects.

Risks Related to the Development and Commercialization of Our Product Candidates

If the FDA requires a second clinical trial for Neutrolin in order for us to submit the NDA, the development of Neutrolin will take longer and cost more to complete and we will need significant additional funds to undertake a second trial.

Although two pivotal clinical trials to demonstrate safety and effectiveness of Neutrolin are generally required by the FDA to secure marketing approval in the U.S., in light of the interim analysis results and the DSMB recommendation, we are in dialogue with the FDA on the appropriate next steps for the development of Neutrolin based on the results of the interim analysis of our recently terminated Phase 3 clinical trial, LOCK-IT-100. However, we can provide no assurances that the FDA will not require a second clinical trial prior to NDA submission for Neutrolin. Were the FDA to require a second clinical trial, the clinical development program for Neutrolin will be more expensive and will take longer to complete. We may need to raise significant additional funds to undertake and complete a second trial. Whether or not and how quickly we complete a second Phase 3 clinical trial would be dependent in part upon the size and scope of the trial, the rate of enrollment of patients, and the rate we collect, clean, lock and analyze the clinical trial database. We could be required to incur additional costs and extend the anticipated time for completion of the trial. If we experience issues related to the clinical trial results, we may incur additional costs and delays in the trial, and may not be able to complete the clinical trial in a cost-effective or timely manner, which would have an adverse effect on our development program for Neutrolin as a treatment for catheter related bloodstream infections.

Our only product Neutrolin is only approved in Europe and is still in development in the U. S.

Neutrolin currently and for at least the near future is our only current product as well as product candidate. Neutrolin has received CE Mark approval in Europe, and we launched it in Germany in December 2013. We also are pursuing development of Neutrolin in the U.S. Our product commercialization and development efforts may not lead to commercially viable products for any of several reasons. For example, our product candidates may fail to be proven safe and effective in clinical trials, or we may have inadequate financial or other resources to pursue development efforts for our product candidates. Even if approved, our products may not be accepted in the marketplace. Neutrolin will require significant additional development, including the preparation and filing of an NDA, possibly a second clinical trial, and/or investment by us or our collaborators as we continue its commercialization, as will any of our other product candidates.

In April 2017, we entered into a commercial collaboration with Hemotech SAS covering France and certain overseas territories. We have entered into agreements with a Saudi Arabian company to market and sell Neutrolin in Saudi Arabia, and with a South Korean company to market, sell and distribute Neutrolin in South Korea upon receipt of regulatory approval in that country. We also have a commercial presence in Germany and the United Arab Emirates. Consequently, we will be dependent on these companies and individuals for the success of sales in those countries and any other countries in which we receive regulatory approval and in which we contract with third parties for the marketing, sale and/or distribution of Neutrolin. If these companies or individuals do not perform for whatever reason, our business, prospects and results of operations will be materially adversely affected. Finding a suitable replacement organization or individual for these or any other companies or individuals with whom we might contract could be difficult, which would further harm our business, prospects and results of operations.

Successful development and commercialization of our products is uncertain.

Our development and commercialization of current and future product candidates is subject to the risks of failure and delay inherent in the development of new pharmaceutical products, including but not limited to the following:

- inability to produce positive data in pre-clinical and clinical trials;
- delays in product development, pre-clinical and clinical testing, or manufacturing;
- unplanned expenditures in product development, clinical testing, or manufacturing;
- failure to receive regulatory approvals;
- emergence of superior or equivalent products;
- inability to manufacture our product candidates on a commercial scale on our own, or in collaboration with third parties; and
- failure to achieve market acceptance.

Because of these risks, our development efforts may not result in any commercially viable products. If a significant portion of these development efforts are not successfully completed, required regulatory approvals are not obtained or any approved products are not commercialized successfully, our business, financial condition, and results of operations will be materially harmed.

Clinical trials required for our product candidates may be expensive and time-consuming, and their outcome is uncertain.

In order to obtain FDA or foreign approval to market a new drug or device product, we must demonstrate proof of safety and effectiveness in humans. Foreign regulations and requirements are similar to those of the FDA. To meet FDA requirements, we must conduct "adequate and well-controlled" clinical trials. Conducting clinical trials is a lengthy, time-consuming, and expensive process. The length of time may vary substantially according to the type, complexity, novelty, and intended use of the product candidate, and often can be several years or more per trial. Delays associated with the Neutrolin development program or the development plans for our other product candidates may cause us to incur additional operating expenses. The commencement and rate of completion of clinical trials may be delayed by many factors, including, for example:

- inability to manufacture sufficient quantities of qualified materials under the FDA's cGMP requirements for use in clinical trials;
- slower than expected rates of patient recruitment;

- failure to recruit a sufficient number of patients;
- modification of clinical trial protocols;
- changes in regulatory requirements for clinical trials;
- lack of effectiveness during clinical trials;
- emergence of unforeseen safety issues;
- delays, suspension, or termination of clinical trials due to the institutional review board responsible for overseeing the study at a particular study site;
- government or regulatory delays or "clinical holds" requiring suspension or termination of the trials.

Further, the results from early pre-clinical and clinical trials are not necessarily predictive of results to be obtained in later clinical trials. Accordingly, even if we obtain positive results from early pre-clinical or clinical trials, we may not achieve the same success in later clinical trials.

Our clinical trials may be conducted in patients with serious or life-threatening diseases for whom conventional treatments have been unsuccessful or for whom no conventional treatment exists, and in some cases, our product is expected to be used in combination with approved therapies that themselves have significant adverse event profiles. During the course of treatment, these patients could suffer adverse medical events or die for reasons that may or may not be related to our products. We cannot ensure that safety issues will not arise with respect to our products in clinical development.

Clinical trials may not demonstrate statistically significant safety and effectiveness to obtain the requisite regulatory approvals for product candidates. The failure of clinical trials to demonstrate safety and effectiveness for the desired indications could harm the development of our product candidates. Such a failure could cause us to abandon a product candidate and could delay development of other product candidates. Any delay in, or termination of, our clinical trials would delay the filing of any NDA or any Premarket Approval Application, or PMA, with the FDA and, ultimately, our ability to commercialize our product candidates and generate product revenues. Any change in, or termination of, our clinical trials could materially harm our business, financial condition, and results of operations.

If we fail to comply with international regulatory requirements we could be subject to regulatory delays, fines or other penalties.

Regulatory requirements in foreign countries for international sales of medical devices often vary from country to country. The occurrence and related impact of the following factors would harm our business:

- delays in receipt of, or failure to receive, foreign regulatory approvals or clearances;
- the loss of previously obtained approvals or clearances; or
- the failure to comply with existing or future regulatory requirements.

The CE Mark is a mandatory conformity mark for products to be sold in the European Economic Area. Currently, 28 countries in Europe require products to bear CE Marking. To market in Europe, a product must first obtain the certifications necessary to affix the CE Mark. The CE Mark is an international symbol of adherence to the Medical Device Directives and the manufacturer's declaration that the product complies with essential requirements. Compliance with these requirements is ascertained within a certified Quality Management System (QMS) pursuant to ISO 13485. In order to obtain and to maintain a CE Mark, a product must be in compliance with the applicable quality assurance provisions of the aforementioned ISO and obtain certification of its quality assurance systems by a recognized European Union notified body. We received CE Mark approval for Neutrolin on July 5, 2013. However, certain individual countries within the European Union require further approval by their national regulatory agencies. Failure to receive or maintain these other requisite approvals could prohibit us from marketing and selling Neutrolin in the entire European Economic Area or elsewhere.

We do not have, and may never obtain, the regulatory approvals we need to market our product candidates outside of the European Union.

While we have received the CE Mark approval for Neutrolin in Europe, certain individual countries within the European Union require further approval by their national regulatory agencies. Failure to receive or maintain these other requisite approvals could prohibit us from marketing and selling Neutrolin in the entire European Economic Area. In addition, we will need regulatory approval to market and sell Neutrolin in foreign countries outside of Europe. We have received regulatory approval in Saudi Arabia, Kuwait, Bahrain and United Arab Emirates.

In the United States, we have no current application for, and have not received the regulatory approvals required for, the commercial sale of any of our product candidates. We have not submitted an NDA, PMA or 510(k) to the FDA for any product candidate. We are preparing an NDA for Neutrolin in hemodialysis catheters based on our recently terminated Phase 3 trial, LOCK-IT-100. We may be required to conduct a second Phase 3 clinical trial before the NDA may be submitted. Financing will be required to conduct a second Phase 3 trial, if required. However, we might not obtain any financing necessary to complete the development of Neutrolin for use in hemodialysis catheters.

We also are pursuing development of taurolidine-based devices for wound closure, surgical meshes, wound management and osteoarthritis. The FDA recently informed us that it regards taurolidine as a new chemical entity and therefore an unapproved drug. Consequently, there is no appropriate predicate device currently marketed in the U.S. on which a 510(k) approval process for these devices could be based. As a result, we will be required to submit a premarket approval application for marketing authorization for these indications. In the event that the NDA for Neutrolin is approved by the FDA, the regulatory pathway for these devices can be revisited with the FDA. Although there will presumably still be no appropriate predicate, *de novo* Class II designation can be proposed, based on a risk assessment and a reasonable assurance of safety and effectiveness.

It is possible that Neutrolin will not receive any further approval or that any of our other product candidates will be approved for marketing. Failure to obtain regulatory approvals, or delays in obtaining regulatory approvals, would adversely affect the successful commercialization of Neutrolin or any other drugs or products that we or our partners develop, impose additional costs on us or our collaborators, diminish any competitive advantages that we or our partners may attain, and/or adversely affect our cash flow, financial condition and results of operations.

Even if approved, our products will be subject to extensive post-approval regulation.

Once a product is approved, numerous post-approval requirements apply in the United States and abroad. Depending on the circumstances, failure to meet these post-approval requirements can result in criminal prosecution, fines, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, or refusal to allow us to enter into supply contracts, including government contracts. In addition, even if we comply with FDA, foreign and other requirements, new information regarding the safety or effectiveness of a product could lead the FDA or a foreign regulatory body to modify or withdraw product approval.

The successful commercialization of Neutrolin will depend on obtaining coverage and reimbursement for use of Neutrolin from third-party payors.

Sales of pharmaceutical products largely depend on the reimbursement of patients' medical expenses by government health care programs and/or private health insurers, both in the U.S. and abroad. Further, significant uncertainty exists as to the reimbursement status of newly approved health care products. We initially expect to sell Neutrolin directly to hospitals and key dialysis center operators, but also plan to expand its usage into intensive care, oncology and total parenteral nutrition patients needing catheters, including Medicare patients. All of these potential customers are healthcare providers who depend upon reimbursement by government and commercial insurance payors for dialysis and other treatments. Reimbursement is strictly governed by these insurance payors. We believe that Neutrolin would be eligible for coverage under various reimbursement programs, including hospital inpatient diagnosis-related groups (DRGs), outpatient ambulatory payment classification (APCs) and the End-Stage Renal Disease Prospective Payment System (ESRD PPS) or under the Durable Medical Equipment, Prosthetics, Orthotics and Supplies (DMEPOS) Fee Schedule, depending on the treatment setting. However, coverage by any of these reimbursement programs is not assured, and even if coverage is granted it could later be revoked or modified under future regulations. Further, the U.S. Centers for Medicare & Medicaid Services (CMS), which administers Medicare and works with states to administer Medicaid, has adopted and will continue to adopt and/or amend rules governing reimbursement for specific treatments, including those we intend to address such as dialysis and ESRD PPS. We anticipate that CMS and private insurers will increasingly demand that manufacturers demonstrate the cost effectiveness of their products as part of the reimbursement review and approval process. Rising healthcare costs have also led many European and other foreign countries to adopt healthcare reform proposals and medical cost containment measures. Similar legislation could be introduced in the U.S. Any measures affecting the reimbursement programs of these governmental and private insurance payors, including any uncertainty in the medical community regarding their nature and effect on reimbursement programs, could have an adverse effect on purchasing decisions regarding Neutrolin, as well as limit the prices we may charge for Neutrolin. The failure to obtain or maintain reimbursement coverage for Neutrolin or any other products could materially harm our operations.

In anticipation that the CMS and private payers will demand that we demonstrate the cost effectiveness of Neutrolin as part of the reimbursement review and approval process, we have incorporated health economic evaluations into our ongoing clinical studies to support this review in the context of the prospective use of Neutrolin in dialysis, the ICU and oncology settings. However, our studies might not be sufficient to support coverage or reimbursement at levels that allow providers to use Neutrolin.

Physicians and patients may not accept and use our products.

Even with the CE Mark approval of Neutrolin, and even if we receive FDA or other foreign regulatory approval for Neutrolin or other product candidates, physicians and patients may not accept and use our products. Acceptance and use of our products will depend upon a number of factors including the following:

- perceptions by members of the health care community, including physicians, about the safety and effectiveness of our drug or device product;
- cost-effectiveness of our product relative to competing products;
- availability of reimbursement for our product from government or other healthcare payors; and
- effectiveness of marketing and distribution efforts by us and our licensees and distributors, if any.

Because we expect sales of Neutrolin to generate substantially all of our product revenues for the foreseeable future, the failure of Neutrolin to find market acceptance would harm our business and would require us to seek additional financing.

Risks Related to Our Business and Industry

Competition and technological change may make our product candidates and technologies less attractive or obsolete.

We compete with established pharmaceutical and medical device companies that are pursuing other forms of prevention or treatment for the same indications we are pursuing and that have greater financial and other resources. Other companies may succeed in developing products earlier than we do, obtaining FDA or any other regulatory agency approval for products more rapidly, or developing products that are more effective than our product candidates. Research and development by others may render our technology or product candidates obsolete or noncompetitive, or result in processes, treatments or cures superior to any therapy we develop. We face competition from companies that internally develop competing technology or acquire competing technology from universities and other research institutions. As these companies develop their technologies, they may develop competitive positions that may prevent, make futile, or limit our product commercialization efforts, which would result in a decrease in the revenue we would be able to derive from the sale of any products.

There can be no assurance that Neutrolin or any other product candidate will be accepted by the marketplace as readily as these or other competing treatments. Furthermore, if our competitors' products are approved before ours, it could be more difficult for us to obtain approval from the FDA or any other regulatory agency. Even if our products are successfully developed and approved for use by all governing regulatory bodies, there can be no assurance that physicians and patients will accept any of our products as a treatment of choice.

Furthermore, the pharmaceutical and medical device industry is diverse, complex, and rapidly changing. By its nature, the business risks associated with the industry are numerous and significant. The effects of competition, intellectual property disputes, market acceptance, and FDA or other regulatory agency regulations preclude us from forecasting regulatory approval, product acceptance, revenues or income with certainty or even confidence.

Healthcare policy changes, including reimbursement policies for drugs and medical devices, may have an adverse effect on our business, financial condition and results of operations.

Market acceptance and sales of Neutrolin or any other product candidates that we develop will depend on reimbursement policies and may be affected by health care reform measures in the United States and abroad. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, decide which drugs they will pay for and establish reimbursement levels. We cannot be sure that reimbursement will be available for Neutrolin or any other product candidates that we develop. Also, we cannot be sure that the amount of reimbursement available, if any, will not reduce the demand for, or the price of, our products. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize Neutrolin or any other product candidates that we develop.

In both the United States and certain foreign jurisdictions, there have been and we expect there will continue to be a number of legislative and regulatory changes to the health care system that could affect our ability to sell our approved products profitably. The U.S. government and other governments have shown significant interest in pursuing healthcare reform. In particular, the Medicare Modernization Act of 2003 revised the payment methodology for many products under the Medicare program in the United States. This has resulted in lower rates of reimbursement. In 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the "Affordable Care Act"), was enacted. The Affordable Care Act substantially changed the way healthcare is financed by both governmental and private insurers. Such government-adopted reform measures may adversely affect the pricing of healthcare products and services in the United States or internationally and the amount of reimbursement available from governmental agencies or other third-party payors.

In recent years, the U.S. Congress has sought to repeal and has significantly amended the Affordable Care Act. We expect that there will continue to be proposals by legislators at both the federal and state levels, regulators and third-party payors to keep healthcare costs down while expanding individual healthcare benefits. Certain of these changes could impose limitations on the prices we will be able to charge for any products that are approved or the amounts of reimbursement available for these products from governmental agencies or other third-party payors or may increase the tax requirements for life sciences companies such as ours. Any such legislation could have an adverse effect on our business, financial condition and results of operations.

Health administration authorities in countries other than the United States may not provide reimbursement for Neutrolin or any of our other product candidates at rates sufficient for us to achieve profitability, or at all. Like the United States, these countries could adopt health care reform proposals and could materially alter their government-sponsored health care programs by reducing reimbursement rates.

Any reduction in reimbursement rates under Medicare or private insurers or foreign health care programs could negatively affect the pricing of our products. If we are not able to charge a sufficient amount for our products, then our margins and our profitability will be adversely affected.

If we lose key management or scientific personnel, cannot recruit qualified employees, directors, officers, or other personnel or experience increases in compensation costs, our business may materially suffer.

We are highly dependent on the principal members of our management and scientific staff, specifically, Khoso Baluch, a director and our Chief Executive Officer, Robert Cook, our Chief Financial Officer, Paul Chew, our Acting Chief Medical Officer, Elizabeth Masson, our Executive Vice President and Head of Clinical Operations, and John Armstrong, our Executive Vice President for Technical Operations. Our future success will depend in part on our ability to identify, hire, and retain current and additional personnel. We experience intense competition for qualified personnel and may be unable to attract and retain the personnel necessary for the development of our business. Moreover, our work force is located in the New York metropolitan area, where competition for personnel with the scientific and technical skills that we seek is extremely high and is likely to remain high. Because of this competition, our compensation costs may increase significantly. In addition, we have only limited ability to prevent former employees from competing with us.

If we are unable to hire additional qualified personnel, our ability to grow our business may be harmed.

Over time, we expect to hire additional qualified personnel with expertise in government regulation, formulation and manufacturing, and sales and marketing, among others. We compete for qualified individuals with numerous pharmaceutical companies, universities and other research institutions. Competition for such individuals is intense, and we cannot be certain that our search for such personnel will be successful. Attracting and retaining such qualified personnel will be critical to our success.

We may not successfully manage our growth.

Our success will depend upon the expansion of our operations to commercialize Neutrolin and the effective management of any growth, which could place a significant strain on our management and our administrative, operational and financial resources. To manage this growth, we may need to expand our facilities, augment our operational, financial and management systems and hire and train additional qualified personnel. If we are unable to manage our growth effectively, our business may be materially harmed.

We face the risk of product liability claims and the amount of insurance coverage we hold now or in the future may not be adequate to cover all liabilities we might incur.

Our business exposes us to the risk of product liability claims that are inherent in the development of drugs. If the use of one or more of our or our collaborators' drugs or devices harms people, we may be subject to costly and damaging product liability claims brought against us by clinical trial participants, consumers, health care providers, pharmaceutical companies or others selling our products.

We currently carry product liability insurance that covers our clinical trials. We cannot predict all of the possible harms or side effects that may result and, therefore, the amount of insurance coverage we hold may not be adequate to cover all liabilities we might incur. Our insurance covers bodily injury and property damage arising from our clinical trials, subject to industry-standard terms, conditions and exclusions. This coverage includes the sale of commercial products. We have expanded our insurance coverage to include the sale of commercial products due to the receipt of the CE Mark approval, but we may be unable to maintain such coverage or obtain commercially reasonable product liability insurance for any other products approved for marketing.

If we are unable to obtain insurance at an acceptable cost or otherwise protect against potential product liability claims, we may be exposed to significant liabilities, which may materially and adversely affect our business and financial position. If we are sued for any injury allegedly caused by our or our collaborators' products and do not have sufficient insurance coverage, our liability could exceed our total assets and our ability to pay the liability. A successful product liability claim or series of claims brought against us would decrease our cash and could cause the value of our capital stock to decrease.

We may be exposed to liability claims associated with the use of hazardous materials and chemicals.

Our research, development and manufacturing activities and/or those of our third-party contractors may involve the controlled use of hazardous materials and chemicals. Although we believe that our safety procedures for using, storing, handling and disposing of these materials comply with federal, state and local, as well as foreign, laws and regulations, we cannot completely eliminate the risk of accidental injury or contamination from these materials. In the event of such an accident, we could be held liable for any resulting damages and any liability could materially adversely affect our business, financial condition and results of operations. In addition, the federal, state and local, as well as foreign, laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous or radioactive materials and waste products may require us to incur substantial compliance costs that could materially adversely affect our business, financial condition and results of operations.

Risks Related to Our Intellectual Property

If we materially breach or default under any of our license agreements, the licensor party to such agreement will have the right to terminate the license agreement, which termination may materially harm our business.

Our commercial success will depend in part on the maintenance of our license agreements. Each of our license agreements provides the licensor with a right to terminate the license agreement for our material breach or default under the agreement, including the failure to make any required milestone or other payments. Should the licensor under any of our license agreements exercise such a termination right, we would lose our right to the intellectual property under the respective license agreement, which loss may materially harm our business.

If we and our licensors do not obtain protection for and successfully defend our respective intellectual property rights, our competitors may be able to take advantage of our research and development efforts to develop competing products.

Our commercial success will depend in part on obtaining further patent protection for our products and other technologies and successfully defending any patents that we currently have or will obtain against third-party challenges. The patents which we currently believe are most material to our business are as follows:

- U.S. Patent No. 8,541,393 (expiring in November 2024) (the "Prosl Patent") use of Neutrolin for preventing infection and maintenance of catheter patency in hemodialysis catheters;
- U.S. Patent No. 6,166,007 (expiring May 2019) (the "Sodemann Patent") a method of inhibiting or preventing infection and blood coagulation at a
 medical prosthetic device; and
- European Patent EP 1 814 562 B1 (expiring October 12, 2025) (the "Prosl European Patent") a low heparin catheter lock solution for maintaining and preventing infection in a hemodialysis catheter.

We are currently seeking further patent protection for our compounds and methods of treating diseases. However, the patent process is subject to numerous risks and uncertainties, and there can be no assurance that we will be successful in protecting our products by obtaining and defending patents. These risks and uncertainties include the following:

- patents that may be issued or licensed may be challenged, invalidated, or circumvented, or otherwise may not provide any competitive advantage;
- our competitors, many of which have substantially greater resources than we have and many of which have made significant investments in competing technologies, may seek, or may already have obtained, patents that will limit, interfere with, or eliminate our ability to make, use, and sell our potential products either in the United States or in international markets;
- there may be significant pressure on the United States government and other international governmental bodies to limit the scope of patent protection both inside and outside the United States for treatments that prove successful as a matter of public policy regarding worldwide health concerns; and
- countries other than the United States may have less restrictive patent laws than those upheld by United States courts, allowing foreign competitors the ability to exploit these laws to create, develop, and market competing products.

In addition, the United States Patent and Trademark Office, or PTO, and patent offices in other jurisdictions have often required that patent applications concerning pharmaceutical and/or biotechnology-related inventions be limited or narrowed substantially to cover only the specific innovations exemplified in the patent application, thereby limiting the scope of protection against competitive challenges. Thus, even if we or our licensors are able to obtain patents, the patents may be substantially narrower than anticipated.

The above mentioned patents and patent applications are exclusively licensed to us. To support our patent strategy, we have engaged in a review of patentability and certain freedom to operate issues, including performing certain searches. However, patentability and certain freedom to operate issues are inherently complex, and we cannot provide assurances that a relevant patent office and/or relevant court will agree with our conclusions regarding patentability issues or with our conclusions regarding freedom to operate issues, which can involve subtle issues of claim interpretation and/or claim liability. Furthermore, we may not be aware of all patents, published applications or published literature that may affect our business either by blocking our ability to commercialize our product candidates, preventing the patentability of our product candidates to us or our licensors, or covering the same or similar technologies that may invalidate our patents, limit the scope of our future patent claims or adversely affect our ability to market our product candidates. Additionally, it is also possible that prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim, may, nonetheless, ultimately be found by a court of law or an administration panel to affect the validity or enforceability of a claim. If a third party were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such loss of patent protection could have a material adverse impact on our business.

In addition to patents, we also rely on trade secrets and proprietary know-how. Although we take measures to protect this information by entering into confidentiality and inventions agreements with our employees, and some but not all of our scientific advisors, consultants, and collaborators, we cannot provide any assurances that these agreements will not be breached, that we will be able to protect ourselves from the harmful effects of disclosure or dispute ownership if they are breached, or that our trade secrets will not otherwise become known or be independently discovered by competitors. If any of these events occurs, or we otherwise lose protection for our trade secrets or proprietary know-how, the value of our intellectual property may be greatly reduced.

Ongoing and future intellectual property disputes could require us to spend time and money to address such disputes and could limit our intellectual property rights.

The biotechnology and pharmaceutical industries have been characterized by extensive litigation regarding patents and other intellectual property rights, and companies have employed intellectual property litigation to gain a competitive advantage. We may initiate or become subject to infringement claims or litigation arising out of patents and pending applications of our competitors, or we may become subject to proceedings initiated by our competitors or other third parties or the PTO or applicable foreign bodies to reexamine the patentability of our licensed or owned patents. In addition, litigation may be necessary to enforce our issued patents, to protect our trade secrets and know-how, or to determine the enforceability, scope, and validity of the proprietary rights of others.

We initiated court proceedings in Germany for patent infringement and unfair use of our proprietary information related to Neutrolin (as described below). We also have had opposition proceedings brought against the European Patent and the German utility model patent which are the basis of our infringement proceedings (as described below). The defense and prosecution of these ongoing and any future intellectual property suits, PTO or foreign proceedings, and related legal and administrative proceedings are costly and time-consuming to pursue, and their outcome is uncertain. An adverse determination in litigation or PTO or foreign proceedings to which we may become a party could subject us to significant liabilities, including damages, require us to obtain licenses from third parties, restrict or prevent us from selling our products in certain markets, or invalidate or render unenforceable our licensed or owned patents. Although patent and intellectual property disputes might be settled through licensing or similar arrangements, the costs associated with such arrangements may be substantial and could include our paying large fixed payments and ongoing royalties. Furthermore, the necessary licenses may not be available on satisfactory terms or at all.

On September 9, 2014, we filed in the District Court of Mannheim, Germany a patent infringement action against TauroPharm GmbH and Tauro-Implant GmbH as well as their respective CEOs (the "Defendants") claiming infringement of our European Patent EP 1 814 562 B1, which was granted by the EPO on January 8, 2014 (the "Prosl European Patent"). The Prosl European Patent covers a low dose heparin catheter lock solution for maintaining patency and preventing infection in a hemodialysis catheter. In this action, we claim that the Defendants infringe on the Prosl European Patent by manufacturing and distributing catheter locking solutions to the extent they are covered by the claims of the Prosl European Patent. We believe that our patent is sound, and are seeking injunctive relief and raising claims for information, rendering of accounts, calling back, destruction and damages. Separately, TauroPharm has filed an opposition with the EPO against the Prosl European Patent alleging that it lacks novelty and inventive step. We cannot predict what other defenses the Defendants may raise, or the ultimate outcome of either of these related matters.

In the same complaint against the same Defendants, we also alleged an infringement (requesting the same remedies) of NDP's utility model DE 20 2005 022 124 U1 (the "Utility Model"), which we believe is fundamentally identical to the Prosl European Patent in its main aspects and claims. The Court separated the two proceedings and the Prosl European Patent and the Utility Model claims are now being tried separately. TauroPharm has filed a cancellation action against the Utility Model before the German Patent and Trademark Office (the "German PTO") based on the similar arguments as those in the opposition against the Prosl European Patent.

On March 27, 2015, the District Court held a hearing to evaluate whether the Utility Model has been infringed by TauroPharm in connection with the manufacture, sale and distribution of its TauroLock-HEP100TM and TauroLock-HEP500TM products. A hearing before the same court was held on January 30, 2015 on the separate, but related, question of infringement of the Prosl European Patent by TauroPharm.

The Court issued its decisions on May 8, 2015 staying both proceedings. In its decisions, the Court found that the commercialization by TauroPharm in Germany of its TauroLock catheter lock solutions Hep100 and Hep500 infringes both the Prosl European Patent and the Utility Model and further that there is no prior use right that would allow TauroPharm to continue to make, use or sell its product in Germany. However, the Court declined to issue an injunction in favor of us that would preclude the continued commercialization by TauroPharm based upon its finding that there is a sufficient likelihood that the EPO, in the case of the Prosl European Patent, or the German PTO, in the case of the Utility Model, may find that such patent or utility model is invalid. Specifically, the Court noted the possible publication of certain instructions for product use that may be deemed to constitute prior art. As such, the District Court determined that it will defer any consideration of the request by us for injunctive and other relief until such time as the EPO or the German PTO has ruled on the underlying validity of the Prosl European Patent and the Utility Model.

The opposition proceeding against the Prosl European Patent before the EPO is ongoing. In its preliminary consideration of the matter, the EPO (and the German PTO) regarded the patent as not inventive or novel due to publication of prior art. Oral proceedings before the Opposition Division at the EPO were held on November 25, 2015, at which the three-judge patent examiner panel considered arguments related to the validity of the Prosl European Patent. The hearing was adjourned due to the fact that the panel was of the view that Claus Herdeis, one of the managing directors of TauroPharm, has to be heard as a witness in a further hearing in order to close some gaps in the documentation presented by TauroPharm as regards the publication of prior art.

The German PTO held a hearing in the validity proceedings relating to the Utility Model on June 29, 2016, at which the panel affirmed its preliminary finding that the Utility Model was invalid based upon prior publication of a reference to the benefits that may be associated with adding heparin to a taurolidine based solution. The decision is subject to appeal and has only a declaratory effect, as the Utility Model had expired in November 2015. Furthermore, it has no bearing on the ongoing consideration of the validity and possible infringement of the Prosl Patent by the EPO. We filed an appeal against the ruling on September 7, 2016.

In October 2016, TauroPharm submitted a further writ to the EPO requesting a date for the hearing and bringing forward further arguments, in particular in view of the June 2016 decision of the German PTO on the invalidity of the utility model, which we have appealed. On November 22, 2017, the EPO in Munich, Germany held a further oral hearing in this matter. At the hearing, the panel held that the Prosl European Patent would be invalidated because it did not meet the requirements of novelty based on a technical aspect of the European intellectual property law. We disagree with this decision and, after the written opinion was issued by the Opposition Division in September 2018, have appealed the decision. We continue to believe that the Prosl European Patent is indeed novel and that its validity should be maintained. There can be no assurance that we will prevail in this matter with either the German PTO or the EPO. In addition, the ongoing Unfair Competition litigation against TauroPharm is not affected and will continue.

On January 16, 2015, we filed a complaint against TauroPharm GmbH and its managing directors in the District Court of Cologne, Germany. In the complaint, we allege violation of the German Unfair Competition Act by TauroPharm for the unauthorized use of its proprietary information obtained in confidence by TauroPharm. We allege that TauroPharm is improperly and unfairly using its proprietary information relating to the composition and manufacture of Neutrolin, in the manufacture and sale of TauroPharm's products TauroLockTM, TauroLock-HEP100 and TauroLock-HEP500. We seek a cease and desist order against TauroPharm from continuing to manufacture and sell any product containing taurolidine (the active pharmaceutical ingredient ("API") of Neutrolin) and citric acid in addition to possible other components, damages for any sales in the past and the removal of all such products from the market. An initial hearing in the District Court of Cologne, Germany was held on November 19, 2015 to consider our claims. The judge made no decision on the merits of our complaint. On January 14, 2016, the court issued an interim decision in the form of a court order outlining several issues of concern that relate primarily to court's interest in clarifying the facts and reviewing any and all available documentation, in particular with regard to the question which specific know-how was provided to TauroPharm by whom and when. We have prepared the requested reply and produced the respective documentation. TauroPharm has also filed another writ within the same deadline and both parties have filed further writs at the end of April setting out their respective argumentation in more detail. A further oral hearing in this matter was held on November 15, 2016. In this hearing, the court heard arguments from us and TauroPharm concerning the allegations of unfair competition. The court made no rulings from the bench, and indicated that it is prepared to further examine the underlying facts of our allegations. On March 7, 2017, the court issued another interim decision in the form of a court order outlining again several issues relating to the argumentation of both sides in the proceedings. In particular the court requested us to further specify our requests and to further substantiate in even more detail which know-how was provided by Biolink to TauroPharm by whom and when. The court also raised the guestion whether the know-how provided at the time to TauroPharm could still be considered to be secret know-how or may have become public in the meantime. The court granted both sides the opportunity to reply to this court order and provide additional facts and evidence until May 15, 2017. Both parties submitted further writs in this matter and the court scheduled a further hearing for May 8, 2018. After having been rescheduled several times, the hearing took place on November 20, 2018. A decision was rendered by the court on December 11, 2018, dismissing the complaint in its entirety. However, we intend to continue to pursue this matter, and still believe that our claims are well-founded. We therefore filed an appeal in January 2019.

If we infringe the rights of third parties we could be prevented from selling products and forced to pay damages and defend against litigation.

If our products, methods, processes and other technologies infringe the proprietary rights of other parties, we could incur substantial costs and we may have to do one or more of the following:

- obtain licenses, which may not be available on commercially reasonable terms, if at all;
- abandon an infringing product candidate;
- redesign our products or processes to avoid infringement;
- stop using the subject matter claimed in the patents held by others;
- pay damages; or
- defend litigation or administrative proceedings, which may be costly whether we win or lose, and which could result in a substantial diversion of our financial and management resources.

Risks Related to Dependence on Third Parties

We currently have no internal marketing and sales organization and currently rely and intend to continue to rely on third parties to market and sell Neutrolin. If we are unable to enter into or maintain agreements with third parties to market and sell Neutrolin or any other product after approval or are unable to establish our own marketing and sales capabilities, we may not be able to generate significant or any product revenues.

We do not have an internal sales organization. To date we have relied, and intend to continue to rely, on third parties for the marketing, sales and distribution of Neutrolin outside of the U.S. The use of third parties to commercialize our approved products reduces the revenues that we would receive if we commercialized these products ourselves.

We have entered into agreements with independent companies to market Neutrolin in Saudi Arabia, the United Arab Emirates and France, and, upon regulatory approval, South Korea. We may seek a sales partner in the U.S. if Neutrolin receives FDA approval or we may undertake marketing and sales of Neutrolin in the U.S. on our own. We will be dependent on the firms and individuals with whom we contract for the success of sales in the countries in which they operate. If these firms or individuals do not perform for whatever reason, our business, prospects and results of operations may be materially adversely affected. Finding a new or replacement organization for sales and marketing could be difficult, which would further harm our business, prospects and results of operations.

If we undertake the marketing and sales of Neutrolin in the U.S. on our own, we will need to hire and create our own marketing and sales infrastructure. The establishment and development of our own marketing and sales force would be expensive and time consuming and we could face delays in such undertaking, which would adversely affect the product launch. We cannot be certain that we would be able to successfully develop this capability. The failure to successfully develop our own marketing and sales infrastructure would have a negative adverse effect on our business and results of operations.

If we are not able to develop and maintain collaborative marketing relationships with licensees or partners, or create an effective sales, marketing, and distribution capability, we may be unable to market our products or market them successfully.

Our business strategy for Neutrolin relies on collaborating with larger firms with experience in marketing and selling medical devices and pharmaceutical products; for other products we may also rely on such marketing collaborations or out-licensing of our product candidates. Specifically, for Neutrolin, we have a distributor agreement with each of a Saudi Arabian, an Emirati, and a South Korean company for sales and marketing (upon receipt of approval to market in South Korea). In April 2017, we announced a commercial collaboration with Hemotech SAS covering France and certain overseas territories. Assuming we receive applicable regulatory approval for other markets, we plan to enter into distribution agreements with one or more third parties for the sale of Neutrolin in various European, Middle East and other markets. However, there can be no assurance that we will be able to successfully maintain those relationships or establish and maintain additional marketing, sales, or distribution relationships, nor can there be assurance that such relationships will be successful, or that we will be successful in gaining market acceptance for our products. To the extent that we enter into any marketing, sales, or distribution arrangements with third parties, our product revenues will be lower than if we marketed and sold our products directly, and any revenues we receive will depend upon the efforts of such third-parties.

If we are unable to establish and maintain such third-party sales and marketing relationships, or choose not to do so, we will have to establish our own in-house capabilities. We currently have no sales, marketing, or distribution infrastructure. To market any of our products directly, we would need to develop a marketing, sales, and distribution force that has both technical expertise and the ability to support a distribution capability. The establishment of a marketing, sales, and distribution capability would take time and significantly increase our costs, possibly requiring substantial additional capital. In addition, there is intense competition for proficient sales and marketing personnel, and we may not be able to attract individuals who have the qualifications necessary to market, sell, and distribute our products. There can be no assurance that we will be able to establish internal marketing, sales, or distribution capabilities. If we are unable to, or choose not to establish these capabilities, or if the capabilities we establish are not sufficient to meet our needs, we will be required to establish collaborative marketing, sales, or distribution relationships with third parties, which we might not be able to do on acceptable terms or at all.

If we or our collaborators are unable to manufacture our products in sufficient quantities or are unable to obtain regulatory approvals for a manufacturing facility, we may be unable to meet demand for our products and we may lose potential revenues.

Completion of our clinical trials and commercialization of Neutrolin and any other product candidate require access to, or development of, facilities to manufacture sufficient supplies. All of our manufacturing processes currently are, and we expect them to continue to be, outsourced to third parties. Specifically, we will rely on one or more manufacturers to supply us and/or our distribution partners with commercial quantities of Neutrolin. If, for any reason, we become unable to rely on our current sources for the manufacture of Neutrolin or any other product candidates or for active pharmaceutical ingredient, or API, either for clinical trials or for commercial quantities, then we would need to identify and contract with additional or replacement third-party manufacturers to manufacture compounds for pre-clinical, clinical, and commercial purposes. We may not be successful in identifying such additional or replacement third-party manufacturers, or in negotiating acceptable terms with any that we do identify. Such third-party manufacturers must receive FDA or applicable foreign approval before they can produce clinical material or commercial product, and any that are identified may not receive such approval or may fail to maintain such approval. In addition, we may be in competition with other companies for access to these manufacturers' facilities and may be subject to delays in manufacturing if the manufacturers give other clients higher priority than they give to us. If we are unable to secure and maintain third-party manufacturing capacity, the development and sales of our products and our financial performance may be materially affected.

Before we could begin to commercially manufacture Neutrolin or any other product candidate on our own, we must obtain regulatory approval of the manufacturing facility and process. The manufacture of drugs for clinical and commercial purposes must comply with cGMP and applicable non-U.S. regulatory requirements. The cGMP requirements govern quality control and documentation policies and procedures. Complying with cGMP and non-U.S. regulatory requirements would require that we expend time, money, and effort in production, recordkeeping, and quality control to assure that the product meets applicable specifications and other requirements. We would also have to pass a pre-approval inspection prior to FDA or non-U.S. regulatory agency approval. Failure to pass a pre-approval inspection may significantly delay regulatory approval of our products. If we fail to comply with these requirements, we would be subject to possible regulatory action and may be limited in the jurisdictions in which we are permitted to sell our products. As a result, our business, financial condition, and results of operations could be materially adversely affected.

Corporate and academic collaborators may take actions that delay, prevent, or undermine the success of our products.

Our operating and financial strategy for the development, clinical testing, manufacture, and commercialization of our product candidates is heavily dependent on our entering into collaborations with corporations, academic institutions, licensors, licensees, and other parties. Our current strategy assumes that we will successfully establish and maintain these collaborations or similar relationships. However, there can be no assurance that we will be successful establishing or maintaining such collaborations. Some of our existing collaborations, such as our licensing agreements, are, and future collaborations may be, terminable at the sole discretion of the collaborator in certain circumstances. Replacement collaborators might not be available on attractive terms, or at all.

In addition, the activities of any collaborator will not be within our control and may not be within our power to influence. There can be no assurance that any collaborator will perform its obligations to our satisfaction or at all, that we will derive any revenue or profits from such collaborations, or that any collaborator will not compete with us. If any collaboration is not pursued, we may require substantially greater capital to undertake on our own the development and marketing of our product candidates and may not be able to develop and market such products successfully, if at all. In addition, a lack of development and marketing collaborations may lead to significant delays in introducing product candidates into certain markets and/or reduced sales of products in such markets.

Data provided by collaborators and others upon which we rely that has not been independently verified could turn out to be false, misleading, or incomplete.

We rely on third-party vendors, scientists, and collaborators to provide us with significant data and other information related to our projects, clinical trials, and business. If such third parties provide inaccurate, misleading, or incomplete data, our business, prospects, and results of operations could be materially adversely affected.

Risks Related to our Common Stock

We will need additional financing to fund our activities in the future, which likely will dilute our stockholders.

To date, our commercial operations have not generated sufficient revenues to enable profitability. As of December 31, 2018, we had an accumulated deficit of \$179.0 million, and incurred net losses from operations of \$26.8 million for the year then ended. Based on the current development plans for Neutrolin in both the U.S. and foreign markets (including the preparation of an NDA for Neutrolin in hemodialysis catheters) and our other operating requirements, management believes that the existing cash at December 31, 2018 plus funding raised through March 8, 2019, will be sufficient to fund operations into the second quarter of 2020. Further, we will need additional funding to prepare for Neutrolin's commercial launch, or if required by the FDA, to undertake a second Phase 3 study prior to filing an NDA. We anticipate that we will incur operating losses for the foreseeable future. Additionally, we will require substantial funds in the future to support our operations. The issuance of additional equity securities, or convertible debt or other derivative securities, likely will dilute some if not all of our then existing stockholders, depending on the financing terms.

Future sales and issuances of our equity securities or rights to purchase our equity securities, including pursuant to equity incentive plans, would result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may, as we have in the past, sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be further diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to existing stockholders.

Pursuant to our 2013 Stock Plan, our Board of Directors is authorized to award up to a total of 11,000,000 shares of common stock or options to purchase shares of common stock to our officers, directors, employees and non-employee consultants. As of December 31, 2018, options to purchase 120,000 shares of common stock issued under our 2006 Stock Plan at a weighted average exercise price of \$1.44 per share, and options to purchase 4,936,326 shares of common stock issued under our 2013 Stock Plan at a weighted average exercise price of \$1.87 per share were outstanding. In addition, at December 31, 2018, there were outstanding warrants to purchase an aggregate of 16,595,016 shares of our common stock at prices ranging from \$0.001 to \$7.00, and shares of our outstanding Series C-2, C-3, D, E and F preferred stock convertible into an aggregate of 18,324,678 shares of our common stock. Stockholders will experience dilution in the event that additional shares of common stock are issued under our 2006 Stock Plan or 2013 Stock Plan, or options issued under our 2006 Stock Plan or 2013 Stock Plan are exercised, or any warrants are exercised for, or preferred stock shares are converted to, common stock.

The anticipated benefits of our recently announced reverse stock split might not materialize.

We have announced our intention to effect a 1-for-5 reverse stock split to be effective on March 26, 2019. The reverse stock split is intended to reduce the number of outstanding shares of our common stock and thereby, absent other factors, to increase the per share market price of our common stock. However, other factors, such as the status of our development program for Neutrolin and other potential products, operating and financial results, market conditions and the market perception of our business may adversely affect the market price of our common stock. As a result, we cannot assure you that the reverse stock split, if completed, will result in the intended benefit of an increase in the market price per share of our common stock after the reverse stock split. Additionally, we cannot assure you that an increase, if any, in the market price of our common stock as a result of the reverse stock split will be in proportion to the reduction in the number of shares of our common stock outstanding before the reverse stock split. Further, we cannot assure you that the market price of our common stock will not decrease in the future. Accordingly, the total market capitalization of our common stock after the reverse stock split may be lower than the total market capitalization before the reverse stock split.

Our common stock price has fluctuated considerably and is likely to remain volatile, in part due to the limited market for our common stock and you could lose all or a part of your investment.

During the period from the completion of our initial public offering, or IPO, on March 30, 2010 through February 28, 2019, the high and low sales prices for our common stock were \$10.40 and \$0.15, respectively. There is a limited public market for our common stock and we cannot provide assurances that an active trading market will develop or continue. As a result of low trading volume in our common stock, the purchase or sale of a relatively small number of shares could result in significant share price fluctuations.

Additionally, the market price of our common stock may continue to fluctuate significantly in response to a number of factors, some of which are beyond our control, including the following:

- the receipt of or failure to obtain additional regulatory approvals for Neutrolin, including FDA approval in the U.S.;
- market acceptance of Neutrolin in those markets in which it is approved for sale;
- our need for additional capital;
- results of clinical trials of our product candidates, including any other Phase 3 trial for Neutrolin in the U.S., if required, or those of our competitors;
- our entry into or the loss of a significant collaboration;
- regulatory or legal developments in the United States and other countries, including changes in the healthcare payment systems;
- changes in financial estimates or investment recommendations by securities analysts relating to our common stock;
- future sales or anticipated sales of our securities by us or our stockholders;
- announcements by our competitors of significant developments, strategic partnerships, joint ventures or capital commitments;
- changes in key personnel;
- variations in our financial results or those of companies that are perceived to be similar to us;
- market conditions in the pharmaceutical and medical device sectors and issuance of new or changed securities analysts' reports or recommendations;
- general economic, industry and market conditions;
- developments or disputes concerning patents or other proprietary rights; and
- any other factors described in this "Risk Factors" section.

In addition, the stock markets in general, and the stock of pharmaceutical and medical device companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

For these reasons and others, an investment in our securities is risky and you should invest only if you can withstand wide fluctuations in and a significant or complete loss of the value of your investment.

A significant number of additional shares of our common stock may be issued at a later date, and their sale could depress the market price of our common stock.

As of December 31, 2018, we had outstanding the following securities that are convertible into or exercisable for shares of our common stock:

- options to purchase an aggregate of 120,000 shares of our common stock issued to our officers, directors, employees and non-employee consultants under our Amended and Restated 2006 Stock Incentive Plan, or the 2006 Stock Plan, with a weighted average exercise price of \$1.44 per share:
- options to purchase an aggregate of 4,936,326 shares of our common stock issued to our officers, directors and non-employee consultants under our 2013 Stock Plan, with a weighted average exercise price of \$1.87 per share;
- warrants for 500,000 shares of common stock issued in May 2013 with an exercise price of \$0.001 per share that expire on May 30, 2019;
- warrants for 750,000 shares of common stock with an exercise price of \$0.001 that expire on October 22, 2019;
- warrants for 725,000 shares of common stock with an exercise price of \$0.90 that expire on January 8, 2020;
- Series C-2 Preferred Stock convertible into 1,500,000 shares of common;
- Series C-3 Preferred Stock convertible into 1,040,000 shares of common stock;
- Series D Preferred Stock convertible into 1,479,240 shares of common stock;
- Series E Preferred Stock convertible into 1,959,759 shares of common stock;
- Series F Preferred Stock convertible into 12,345,679 shares of common stock, subject to adjustment;
- warrants for 682,500 shares of common stock issued in March 2014 with an exercise price of \$2.50 per share that expire on September 10, 2019;
- warrants for 200,000 shares of common stock with an exercise price of \$7.00 that expire on March 3, 2020;
- warrants for 83,400 shares of common stock with an exercise price of \$7.00 that expire on March 25, 2020;
- Series B warrants for 11,974,839 shares of common stock with an exercise price of \$1.05 that expire on August 10, 2022;
- underwriter warrants for 664,419 shares of common stock with an exercise price of \$0.9375 that expire on August 10, 2022;
- warrants for 564.858 shares of common stock with an exercise price of \$0.001 that expire on November 16, 2020;
- warrants for 450,000 shares of common stock with an exercise price of \$1.50 that expire on December 31, 2023;
- Senior convertible note convertible into 5,000,000 shares of common stock; and
- restricted stock units for 29,087 shares of common stock with an average grant date fair value of \$2.08 per share.

The possibility of the issuance of these shares, as well as the actual sale of such shares, could substantially reduce the market price for our common stock and impede our ability to obtain future financing.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult.

Provisions in our Amended and Restated Certificate of Incorporation, as amended, and our Amended and Restated Bylaws, as well as provisions of the General Corporation Law of the State of Delaware, or DGCL, may discourage, delay or prevent a merger, acquisition or other change in control of our company, even if such a change in control would be beneficial to our stockholders. These provisions include the following:

- authorizing the issuance of "blank check" preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;
- prohibiting our stockholders from fixing the number of our directors; and
- establishing advance notice requirements for stockholder proposals that can be acted on at stockholder meetings and nominations to our Board of Directors

These provisions may 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, which is responsible for appointing the members of our management. In addition, we are subject to Section 203 of the DGCL, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder for a period of three years following the date on which the stockholder became an interested stockholder, unless such transactions are approved by the board of directors. This provision could have the effect of discouraging, delaying or preventing someone from acquiring us or merging with us, whether or not it is desired by, or beneficial to, our stockholders. Any provision of our Amended and Restated Certificate of Incorporation, as amended, or Amended and Restated Bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock and could also affect the price that some investors are willing to pay for our common stock.

If we fail to comply with the continued listing standards of the NYSE American, it may result in a delisting of our common stock from the exchange.

Our common stock is currently listed for trading on the NYSE American, and the continued listing of our common stock on the NYSE American is subject to our compliance with a number of listing standards. These listing standards include the requirement for avoiding sustained losses and maintaining a minimum level of stockholders' equity. In June 2018, we received a notice from the NYSE American that we did not meet continued listing standards of the NYSE American as set forth in Part 10 of the Company Guide. Specifically, we are not in compliance with Section 1003(a)(i) (requiring stockholders' equity of \$2.0 million or more if the issuer has reported losses from continuing operations and/or net losses in two of its three most recent fiscal years), Section 1003(a)(ii) (requiring stockholders' equity of \$4.0 million or more if the issuer has reported losses from continuing operations and/or net losses in three of its four most recent fiscal years); and Section 1003(a)(iii) (requiring stockholders' equity of \$6.0 million or more if the issuer has reported losses from continuing operations and/or net losses in its five most recent fiscal years). The notice noted that we reported stockholders' equity of \$0.8 million as of March 31, 2018, and net losses in our five most recent fiscal years ended December 31, 2017. As a result, we have become subject to the procedures and requirements of Section 1009 of the Company Guide. We had to submit to the NYSE American no later than July 16, 2018 a plan of compliance to address how we intend to regain compliance with Section 1003(a)(i), Section 1003(a)(ii) or Section 1003(a)(ii) of the Company Guide by December 16, 2019 (the "Sections 1003(a)(i)-(iii) Plan Period, during which time we will be subject to periodic review to determine whether we are making progress consistent with the plan. If we are not in compliance with the NYSE American's continued listing standards of Section 1003(a)(i), Section 1003(a)(ii) or Section 1003(a)(iii) within the timeframe provided, or do not make

If our common stock were no longer listed on the NYSE American, investors might only be able to trade on one of the over-the-counter markets, including the OTC Bulletin Board ® or in the Pink Sheets ® (a quotation medium operated by Pink Sheets LLC). This would impair the liquidity of our common stock not only in the number of shares that could be bought and sold at a given price, which might be depressed by the relative illiquidity, but also through delays in the timing of transactions and reduction in media coverage.

Prior to fiscal 2015, we had identified a material weakness in our internal control over financial reporting, and our current internal control over financial reporting and our disclosure controls and procedures may not prevent all possible errors that could occur.

In the several years prior to fiscal 2015, we had identified a material weakness in our internal control over financial reporting that was related to our limited finance staff and the resulting ineffective management review over financial reporting, coupled with increasingly complex accounting treatments associated with our financing activities and European expansion. While we remediated this material weakness in 2015, we cannot be certain that material weaknesses will not arise again.

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 satisfied. Internal control over financial reporting and disclosure controls and procedures are designed to give a reasonable assurance that they are effective to achieve their objectives. We cannot provide absolute assurance that all of our possible future control issues will be detected. These inherent limitations include the possibility that judgments in our decision making can be faulty, and that isolated breakdowns can occur because of simple human error or mistake. The design of our system of controls is based in part upon assumptions about the likelihood of future events, and there can be no assurance that any design will succeed absolutely in achieving our stated goals under all potential future or unforeseeable conditions. Because of the inherent limitations in a cost-effective control system, misstatements due to error could occur and not be detected. This and any future failures could cause investors to lose confidence in our reported financial information, which could have a negative impact on our financial condition and stock price.

Penny stock regulations may impose certain restrictions on marketability of our securities.

The SEC has adopted regulations which generally define a "penny stock" to be any equity security that has a market price of less than \$5.00 per share or an exercise price of less than \$5.00 per share, subject to certain exceptions. A security listed on a national securities exchange is exempt from the definition of a penny stock. Our common stock is listed on the NYSE American and so is not considered a penny stock. However, if we fail to maintain our common stock's listing on the NYSE American, our common stock would be considered a penny stock. In that event, our common stock would be subject to rules that impose additional sales practice requirements on broker-dealers who sell such securities to persons other than established customers and accredited investors (generally those with assets in excess of \$1,000,000 or annual income exceeding \$200,000, or \$300,000 together with their spouse). For transactions covered by such rules, the broker-dealer must make a special suitability determination for the purchase of such securities and have received the purchaser's written consent to the transaction prior to the purchase. Additionally, for any transaction involving a penny stock, unless exempt, the rules require the delivery, prior to the transaction, of a risk disclosure document mandated by the SEC relating to the penny stock market. The broker-dealer must also disclose the commission payable to both the broker-dealer and the registered representative, current quotations for the securities and, if the broker-dealer is the sole market maker, the broker-dealer must disclose this fact and the broker-dealer's presumed control over the market. Finally, monthly statements must be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks. Broker-dealers must wait two business days after providing buyers with disclosure materials regarding a security before effecting a transaction in such security. Consequently, the "penny stock" rules restrict

Stockholders should be aware that, according to the SEC, the market for penny stocks has suffered in recent years from patterns of fraud and abuse. Such patterns include:

- control of the market for the security by one or more broker-dealers that are often related to the promoter or issuer;
- manipulation of prices through prearranged matching of purchases and sales and false and misleading press releases;
- "boiler room" practices involving high pressure sales tactics and unrealistic price projections by inexperienced sales persons;
- excessive and undisclosed bid-ask differentials and markups by selling broker-dealers; and
- the wholesale dumping of the same securities by promoters and broker-dealers after prices have been manipulated to a desired level, along with the
 inevitable collapse of those prices with consequent investor losses.

We do not intend to pay dividends on our common stock so any returns on our common stock will be limited to the value of our common stock.

We have never declared dividends on our common stock, and currently do not plan to declare dividends on shares of our common stock in the foreseeable future. Pursuant to the terms of our Series D, E and F Non-Voting Convertible Preferred Stock, we may not declare or pay any dividends or make any distributions on any of our shares or other equity securities as long as any of those preferred shares remain outstanding. We currently expect to retain future earnings, if any, for use in the operation and expansion of our business. The payment of cash dividends in the future, if any, will be at the discretion of our Board of Directors and will depend upon such factors as earnings levels, capital requirements, our overall financial condition and any other factors deemed relevant by our Board of Directors. Any return to holders of our common stock will be limited to the value of their common stock.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our principal executive offices are located in approximately 6,960 square feet of office space in Berkeley Heights, New Jersey. We sublease this office pursuant to a sublease agreement dated September 2017 which runs from September 15, 2017 to June 29, 2020. This sublease is rent-free to the Company.

Our subsidiary leases its offices in Fulda, Germany pursuant to a three-month lease agreement which commenced in June 2017, renewable every three months for a base monthly payment of €400.

We believe that our existing facilities are adequate to meet our current needs, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms.

Item 3. Legal Proceedings

On September 9, 2014, we filed in the District Court of Mannheim, Germany a patent infringement action against TauroPharm GmbH and Tauro-Implant GmbH as well as their respective CEOs (the "Defendants") claiming infringement of our European Patent EP 1 814 562 B1, which was granted by the EPO on January 8, 2014 (the "Prosl European Patent"). The Prosl European Patent covers a low dose heparin catheter lock solution for maintaining patency and preventing infection in a hemodialysis catheter. In this action, we claim that the Defendants infringe on the Prosl European Patent by manufacturing and distributing catheter locking solutions to the extent they are covered by the claims of the Prosl European Patent. We believe that our patent is sound, and are seeking injunctive relief and raising claims for information, rendering of accounts, calling back, destruction and damages. Separately, TauroPharm has filed an opposition with the EPO against the Prosl European Patent alleging that it lacks novelty and inventive step. We cannot predict what other defenses the Defendants may raise, or the ultimate outcome of either of these related matters.

In the same complaint against the same Defendants, we also alleged an infringement (requesting the same remedies) of NDP's utility model DE 20 2005 022 124 U1 (the "Utility Model"), which we believe is fundamentally identical to the Prosl European Patent in its main aspects and claims. The Court separated the two proceedings and the Prosl European Patent and the Utility Model claims are now being tried separately. TauroPharm has filed a cancellation action against the Utility Model before the German Patent and Trademark Office (the "German PTO") based on the similar arguments as those in the opposition against the Prosl European Patent.

On March 27, 2015, the District Court held a hearing to evaluate whether the Utility Model has been infringed by TauroPharm in connection with the manufacture, sale and distribution of its TauroLock-HEP100TM and TauroLock-HEP500TM products. A hearing before the same court was held on January 30, 2015 on the separate, but related, question of infringement of the Prosl European Patent by TauroPharm.

The Court issued its decisions on May 8, 2015, staying both proceedings. In its decisions, the Court found that the commercialization by TauroPharm in Germany of its TauroLock catheter lock solutions Hep100 and Hep500 infringes both the Prosl European Patent and the Utility Model and further that there is no prior use right that would allow TauroPharm to continue to make, use or sell its product in Germany. However, the Court declined to issue an injunction in favor of us that would preclude the continued commercialization by TauroPharm based upon its finding that there is a sufficient likelihood that the EPO, in the case of the Prosl European Patent, or the German PTO, in the case of the Utility Model, may find that such patent or utility model is invalid. Specifically, the Court noted the possible publication of certain instructions for product use that may be deemed to constitute prior art. As such, the District Court determined that it will defer any consideration of the request by us for injunctive and other relief until such time as the EPO or the German PTO made a final decision on the underlying validity of the Prosl European Patent and the Utility Model.

The opposition proceeding against the Prosl European Patent before the EPO is ongoing. In its preliminary consideration of the matter, the EPO (and the German PTO) regarded the patent as not inventive or novel due to publication of prior art. Oral proceedings before the Opposition Division at the EPO were held on November 25, 2015, at which the three-judge patent examiner panel considered arguments related to the validity of the Prosl European Patent. The hearing was adjourned due to the fact that the panel was of the view that Claus Herdeis, one of the managing directors of TauroPharm, had to be heard as a witness in a further hearing in order to close some gaps in the documentation presented by TauroPharm as regards the publication of prior art.

The German PTO held a hearing in the validity proceedings relating to the Utility Model on June 29, 2016, at which the panel affirmed its preliminary finding that the Utility Model was invalid based upon prior publication of a reference to the benefits that may be associated with adding heparin to a taurolidine based solution. The decision has only a declaratory effect, as the Utility Model had expired in November 2015. Furthermore, it has no bearing on the ongoing consideration by the EPO of the validity and possible infringement of the Prosl European Patent. We filed an appeal against the ruling on September 7, 2016.

In October 2016, TauroPharm submitted a further writ to the EPO requesting a date for the hearing and bringing forward further arguments, in particular in view of the June 2016 decision of the German PTO on the invalidity of the utility model, which we have appealed. On November 22, 2017, the EPO in Munich, Germany held a further oral hearing in this matter. At the hearing, the panel held that the Prosl European Patent would be invalidated because it did not meet the requirements of novelty based on a technical aspect of the European intellectual property law. We disagree with this decision and, after the written opinion was issued by the Opposition Division in September 2018, have appealed the decision. We continue to believe that the Prosl European Patent is indeed novel and that its validity should be maintained. There can be no assurance that we will prevail in this matter with either the German PTO or the EPO. In addition, the ongoing Unfair Competition litigation against TauroPharm is not affected and will continue.

On January 16, 2015, we filed a complaint against TauroPharm GmbH and its managing directors in the District Court of Cologne, Germany. In the complaint, we allege violation of the German Unfair Competition Act by TauroPharm for the unauthorized use of our proprietary information obtained in confidence by TauroPharm. We allege that TauroPharm is improperly and unfairly using our proprietary information relating to the composition and manufacture of Neutrolin, in the manufacture and sale of TauroPharm's products TauroLockTM, TauroLock-HEP100 and TauroLock-HEP500. We seek a cease and desist order against TauroPharm from continuing to manufacture and sell any product containing taurolidine (the active pharmaceutical ingredient ("API") of Neutrolin) and citric acid in addition to possible other components, damages for any sales in the past and the removal of all such products from the market. An initial hearing in the District Court of Cologne, Germany, was held on November 19, 2015 to consider our claims. The judge made no decision on the merits of our complaint. On January 14, 2016, the court issued an interim decision in the form of a court order outlining several issues of concern that relate primarily to court's interest in clarifying the facts and reviewing any and all available documentation, in particular with regard to the question which specific know-how was provided to TauroPharm by whom and when. We prepared the requested reply and produced the respective documentation. TauroPharm also filed another writ within the same deadline and both parties filed further writs at the end of April 2016 setting out their respective argumentation in more detail. A further oral hearing in this matter was held on November 15, 2016. In this hearing, the court heard arguments from CorMedix and TauroPharm concerning the allegations of unfair competition. The court made no rulings from the bench, and indicated that it is prepared to further examine the underlying facts of our allegations. On March 7, 2017, the court issued another interim decision in the form of a court order outlining again several issues relating to the argumentation of both sides in the proceedings. In particular, the court requested us to further specify our requests and to further substantiate in even more detail which know-how was provided by Biolink to TauroPharm by whom and when. The court also raised the guestion whether the know-how provided at the time to TauroPharm could still be considered to be secret know-how or may have become public in the meantime. The court granted both sides the opportunity to reply to this court order and provide additional facts and evidence until May 15, 2017. Both parties submitted further writs in this matter and the court scheduled a further hearing for May 8, 2018. After having been rescheduled several times, the hearing took place on November 20, 2018. A decision was rendered by the court on December 11, 2018, dismissing the complaint in its entirety. However, we intend to continue to pursue this matter, and still believe firmly that our claims are well-founded. We therefore filed an appeal in January 2019.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for the Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market for Common Equity

Our common stock trades on the NYSE American under the symbol "CRMD." The following table sets forth the high and low sales prices for our common stock for the periods indicated as reported by NYSE American:

	 2018			 2017			
	 High		Low	 High		Low	
First Quarter	\$ 0.59	\$	0.17	\$ 2.48	\$	1.44	
Second Quarter	\$ 0.40	\$	0.17	\$ 1.64	\$	0.36	
Third Quarter	\$ 1.03	\$	0.23	\$ 0.54	\$	0.32	
Fourth Quarter	\$ 2.40	\$	0.84	\$ 0.77	\$	0.45	

Based upon information furnished by our transfer agent, at March 7, 2019, we had approximately 66 holders of record of our common stock.

Dividend Policy

We have never declared dividends on our equity securities, and currently do not plan to declare dividends on shares of our common stock in the foreseeable future. We expect to retain our future earnings, if any, for use in the operation and expansion of our business. Further, pursuant to the terms of our Series D and Series E Non-Voting Convertible Preferred Stock, we may not declare or pay any dividends or make any distributions on any of our shares or other equity securities as long as any of those preferred shares remain outstanding. Subject to the foregoing, the payment of cash dividends in the future, if any, will be at the discretion of our Board of Directors and will depend upon such factors as earnings levels, capital requirements, our overall financial condition and any other factors deemed relevant by our Board of Directors.

Equity Compensation Plan Information

The following table provides information as of December 31, 2018 about our common stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans (including individual arrangements):

		Number
		ofsecurities
		remaining
		available for
Number of		future issuance
securities to be	Weighted-	under equity
issued upon	average exercise	compensation
exercise of	price of	plans (excluding
outstanding	outstanding	securities
options, warrants	options, warrants	reflected in
and rights(a)	and rights(b)	column (a) (c)
5,056,326	\$ 1.86	5,025,305
	securities to be issued upon exercise of outstanding options, warrants and rights(a)	securities to be issued upon exercise of outstanding options, warrants and rights(a) Weighted- average exercise price of outstanding options, warrants and rights(b)

⁽¹⁾ Our Amended and Restated 2006 Stock Incentive Plan was approved by our stockholders on February 19, 2010. Our 2013 Stock Incentive Plan was approved by our stockholders on July 30, 2013.

Item 6. Selected Financial Data

Not applicable.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis together with our audited financial statements and the accompanying notes. This discussion contains forward-looking statements, within the meaning of Section 27A of Securities Act, Section 21E of the Exchange Act, and the Private Securities Litigation Reform Act of 1995, including statements regarding our expected financial condition, business and financing plans. These statements involve risks and uncertainties. Our actual results could differ materially from the results described in or implied by these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this report, particularly under the heading "Risk Factors."

Overview

We are a biopharmaceutical company focused on developing and commercializing therapeutic products for the prevention and treatment of infectious and inflammatory diseases.

Our primary focus is to develop our lead product candidate, Neutrolin[®], for potential commercialization in the United States ("U.S.") and other key markets. We have in-licensed the worldwide rights to develop and commercialize Neutrolin, which is a novel anti-infective solution (a formulation of taurolidine, citrate and heparin 1000 u/ml) under development in the U.S. for the reduction and prevention of catheter-related infections and thrombosis in patients requiring central venous catheters in clinical settings such as dialysis, critical/intensive care, and oncology. Infection and thrombosis represent key complications among critical care/intensive care and cancer patients with central venous catheters. These complications can lead to treatment delays and increased costs to the healthcare system when they occur due to hospitalizations, the need for IV antibiotic treatment, long-term anticoagulation therapy, removal/replacement of the central venous catheter, related treatment costs and increased mortality. We believe Neutrolin has the potential to address a significant unmet medical need and represents a significant market opportunity.

In July 2013, we received CE Mark approval for Neutrolin. To date, Neutrolin is registered and may be sold in certain European Union ("EU") and Middle Eastern countries for the prevention of catheter-related bloodstream infections and maintenance of catheter patency in hemodialysis patients.

In December 2015, we initiated a multicenter, double-blind, randomized, active control Phase 3 clinical trial in the U.S. in hemodialysis patients with a central venous catheter ("LOCK-IT-100"). In April 2017, a safety review by our independent Data Safety Monitoring Board, or DSMB, was completed. The DSMB unanimously concluded that it was safe to continue the LOCK-IT-100 clinical trial as designed based on its evaluation of data from the first 279 patients randomized into the trial. On July 25, 2018, the DSMB completed its review of the interim analysis of the data from the LOCK-IT-100 study and, because the pre-specified level of statistical significance was reached and efficacy had been demonstrated, the DSMB recommended the study be terminated early. The DSMB also reported that there were no safety concerns.

Although two pivotal clinical trials to demonstrate safety and effectiveness of Neutrolin are generally required by the FDA to secure marketing approval in the U.S., based on the recently completed and unblinded topline results of the LOCK-IT-100 study, we have begun discussions with the FDA on the appropriate next steps to support regulatory approval for Neutrolin. We agreed to provide the FDA a detailed analysis of the full data set including secondary endpoints from the LOCK-IT-100 study to facilitate FDA's consideration of our request to file the New Drug Application ("NDA") for Neutrolin on the basis of the LOCK-IT-100 study results. These data became available following the locking and unblinding of the study data in late January 2019. The analysis is planned to be completed over the next several weeks.

The FDA also agreed that we could request consideration of Neutrolin for approval under the Limited Population Pathway for Antibacterial and Antifungal Drugs, or LPAD. LPAD, passed as part of the 21st Century Cures Act, is a new program intended to expedite the development of drug products which allows for the FDA's determination of safety and effectiveness to reflect the risk-benefit profile of the drug in the intended limited population, taking into account the severity, rarity, or prevalence of the infection and the availability of alternative treatments in the limited population.

In addition to Neutrolin, we are sponsoring a pre-clinical research collaboration for the use of taurolidine as a possible treatment for rare orphan pediatric tumors. In February 2018, the FDA granted orphan drug designation to taurolidine for the treatment of neuroblastoma. We are seeking one or more strategic partners or other sources of capital to help us develop and commercialize taurolidine for the treatment of neuroblastoma. We are also evaluating opportunities for the possible expansion of taurolidine as a platform compound for use in certain medical devices. Patent applications have been filed in wound closure, surgical meshes, wound management, and osteoarthritis, including visco-supplementation. Based on initial feasibility work, we are advancing pre-clinical studies for taurolidine-infused surgical meshes, suture materials, and hydrogels. We will seek to establish development/commercial partnerships as these programs advance.

The FDA has informed us that it regards taurolidine as a new chemical entity and therefore an unapproved drug. Consequently, there is no appropriate predicate device currently marketed in the U.S. on which a 510(k) approval process could be based. As a result, we will be required to submit a premarket approval application, or PMA, for marketing authorization for these indications. In the event that an NDA for Neutrolin is approved by the FDA, the regulatory pathway for these product candidates may be revisited with the FDA. Although there may be no appropriate predicate, *de novo* Class II designation can be proposed, based on a risk assessment and a reasonable assurance of safety and effectiveness.

In August 2017, we secured a research grant from the National Institutes of Health (NIH) to expand our antimicrobial hydrogel medical device program. In addition to our ongoing development of taurolidine-incorporated hydrogels to reduce infections in common burns, this funding will finance the development of an advanced hydrogel formulation that is designed to reduce the risk of potentially life-threatening infection and promote healing of more severe burn injuries, for which there is significant need.

As previously announced, the New Jersey Economic Development Authority ("NJEDA") has approved our application to participate in the New Jersey Technology Business Tax Certificate Transfer ("NOL") program for State Fiscal Year 2018. The approval will allow us to sell approximately \$5.4 million of the total \$6.1 million in available tax benefits to an unrelated, profitable New Jersey corporation in return for approximately \$5.0 million in cash. Closing is subject to NJEDA's typical closing conditions, which are in process.

Since our inception, our operations to date have been primarily limited to conducting clinical trials and establishing manufacturing for our product candidates, licensing product candidates, business and financial planning, research and development, seeking regulatory approval for our products, initial commercialization activities for Neutrolin in the EU and other foreign markets, and maintaining and improving our patent portfolio. We have funded our operations primarily through debt and equity financings. We have generated significant losses to date, and we expect to use substantial amounts of cash for our operations as we close out our LOCK-IT-100 Phase 3 clinical trial in hemodialysis patients with catheters, possibly plan a second Phase 3 clinical trial for Neutrolin, if required by the FDA, prepare and submit a NDA for Neutrolin to the FDA, commercialize Neutrolin in the EU and other foreign markets, pursue business development activities, and incur additional legal costs to defend our intellectual property. As of December 31, 2018, we had an accumulated deficit of approximately \$179.0 million. We are unable to predict the extent of any future losses or when we will become profitable, if ever.

Financial Operations Overview

Revenue

We have not generated substantial revenue since our inception. Through December 31, 2018, we have funded our operations primarily through debt and equity financings.

Research and Development Expense

Research and development, or R&D, expense consists of: (i) internal costs associated with our development activities; (ii) payments we make to third party contract research organizations, contract manufacturers, investigative sites, and consultants; (iii) technology and intellectual property license costs; (iv) manufacturing development costs; (v) personnel related expenses, including salaries, stock—based compensation expense, benefits, travel and related costs for the personnel involved in drug development; (vi) activities relating to regulatory filings and the advancement of our product candidates through pre-clinical studies and clinical trials; and (vii) facilities and other allocated expenses, which include direct and allocated expenses for rent, facility maintenance, as well as laboratory and other supplies. All R&D is expensed as incurred.

Conducting a significant amount of development is central to our business model. Product candidates in later-stage clinical development generally have higher development costs than those in earlier stages of development, primarily due to the significantly increased size and duration of the clinical trials. We expect to incur significant R&D expenses for the foreseeable future in order to complete development of Neutrolin in the U.S., especially closing out the LOCK-IT-100 clinical trial, preparing an NDA for Neutrolin and possibly planning a second Phase 3 trial, if required.

The process of conducting pre-clinical studies and clinical trials necessary to obtain regulatory approval is costly and time consuming. The probability of success for each product candidate and clinical trial may be affected by a variety of factors, including, among others, the quality of the product candidate's early clinical data, investment in the program, competition, manufacturing capabilities and commercial viability. As a result of the uncertainties associated with clinical trial enrollments and the risks inherent in the development process, we are unable to determine the duration and completion costs of current or future clinical stages of our product candidates or when, or to what extent, we will generate revenues from the commercialization and sale of any of our product candidates.

Development timelines, probability of success and development costs vary widely. We are currently focused on clinical development of Neutrolin in the U.S. and optimization of sales in foreign markets where Neutrolin is approved. In December 2015, we contracted with our contract research organization, or CRO, to help us conduct our LOCK-IT-100 Phase 3 clinical trial in hemodialysis patients with central venous catheters to demonstrate the efficacy and safety of Neutrolin in preventing catheter-related bloodstream infections and blood clotting in subjects receiving hemodialysis therapy as treatment for end stage renal disease. During 2017, we modified the original contract to cover various changes in cost due to timeline extensions, protocol changes, and additional activities related to the collection of retrospective data outside the treatment centers. In 2018, we brought in-house and assumed direct responsibility for several aspects of the study, among them site management and review of severe adverse events, or SAEs, for the remainder of the study. At December 31, 2018, approximately \$28.5 million of clinical trial expense has been recorded in connection with the Master Service Agreement and work orders. Approximately \$24.0 million has been paid. We contested a substantial amount of the unpaid clinical trial expense due to the unexpected delay and additional costs we incurred in preparing for the interim analysis of the LOCK-IT-100 study. In November 2018, we signed a confidential settlement agreement with the CRO in which we received cash and other consideration in return for agreeing to make cumulative net payments of approximately \$6.2 million, plus investigator fees and third-party costs that had not been invoiced as of September 30, 2018. Among other benefits, the settlement agreement resulted in full satisfaction of all outstanding accounts payable and accrued expenses related to the period through June 30, 2018. Additionally, in parallel with the settlement agreement, a new work order under the Master S

We are pursuing additional opportunities to generate value from taurolidine, an active component of Neutrolin. Based on initial feasibility work, we have completed an initial round of pre-clinical studies for taurolidine-infused surgical meshes, suture materials, and hydrogels, which will require a PMA regulatory pathway for approval. We are also involved in a pre-clinical research collaboration for the use of taurolidine as a possible treatment for rare orphan pediatric tumors. In February 2018, the FDA granted orphan drug designation to taurolidine for the treatment of neuroblastoma. We are seeking one or more strategic partners or other sources of capital to help us develop and commercialize taurolidine for the treatment of neuroblastoma.

Selling, General and Administrative Expense

Selling, general and administrative, or SG&A, expense includes costs related to commercial personnel, medical education professionals, marketing and advertising, salaries and other related costs, including stock-based compensation expense, for persons serving in our executive, sales, finance and accounting functions. Other SG&A expense includes facility-related costs not included in R&D expense, promotional expenses, costs associated with industry and trade shows, and professional fees for legal services and accounting services.

Change in Fair Value of Derivative Liabilities

In November 2017, we entered into a backstop agreement with an existing long-term institutional investor to purchase 2,000 additional Series F convertible preferred stock at \$1,000 per share, at our sole discretion, beginning January 15, 2018 through March 31, 2018. As consideration for the backstop agreement, we issued 564,858 warrants, exercisable for three years, to purchase shares of our common stock at a per share exercise price of \$0.001. These warrants were initially classified as derivative liability as we had a conditional obligation to settle these warrants by issuing a variable number of shares with variations of the obligation based on inputs other than the fair value of our shares (i.e. the amount subject to the backstop agreement). In November 2017, we initially recorded a derivative liability of \$270,592 and a corresponding reduction to additional paid in capital based on the initial Black Scholes valuation. In December 2017, the number of warrants issued was determined and, as a result, the derivative liability was reclassified to equity. Prior to the reclassification to equity, an expense of \$56,487 for the change in fair value of derivative liability was recorded on our consolidated statement of operations and comprehensive income (loss) during the fourth quarter of 2017.

As previously disclosed, at the time we issued the warrants in our May 2017 public offering, we did not have a sufficient number of authorized shares of common stock to cover the shares issuable upon exercise of the warrants and therefore recorded and classified the fair value of the warrants as a derivative liability at the issuance date and marked-to-market at each balance sheet date. The change in the fair value of derivative liability is the difference between the fair value of the warrants recorded on issuance date and the fair value of warrants at the balance sheet date, with any decrease or increase in the estimated fair value being recorded in other income (expense). On August 9, 2017, we amended our certificate of incorporation to increase our authorized shares and we, as of that date, have sufficient authorized shares to cover shares issuable upon the conversion of the warrants. The fair value of these warrants was re-measured on August 10, 2017, the date the warrants became exercisable and were reclassified from liability to equity, which resulted in a loss of \$121,000, recorded on our consolidated statement of operations and comprehensive income (loss) for the year ended December 31, 2017.

Foreign Currency Exchange Transaction Gain (Loss)

Foreign currency exchange transaction gain (loss) is the result of re-measuring transactions denominated in a currency other than our functional currency and is reported in the consolidated statement of operations as a separate line item within other income (expense). The intercompany loans outstanding are not expected to be repaid in the foreseeable future and the nature of the funding advanced is of a long-term investment nature. As such, unrealized foreign exchange movements related to long-term intercompany loans are recorded in other comprehensive income (loss).

Interest Income

Interest income consists of interest earned on our cash and cash equivalents and short-term investments.

Interest Expense

Interest expense consists of interest incurred on financing of expenditures.

Results of Operations

Comparison of the Years Ended December 31, 2018 and 2017

The following is a tabular presentation of our consolidated operating results for the years ended December 31, 2018 and 2017 (in thousands):

			% of Change Increase
	2018	2017	(Decrease)
Revenue	\$ 430	\$ 329	31%
Cost of sales	(397)	(115)	245%
Gross profit (loss)	33	214	(85)%
Operating Expenses:			
Research and development	(18,822)	(24,486)	(23)%
Selling, general and administrative	(8,075)	(8,652)	(7)%
Total operating expenses	(26,897)	(33,138)	(19)%
Loss from operations	(26,864)	(32,924)	(18)%
Interest income	37	111	(67)%
Foreign exchange transaction loss	(1)	(14)	(93)%
Change in fair value of derivative liabilities	-	(177)	(100)%
Interest expense	(2)	(6)	(67)%
Total other income (expense)	34	(86)	(140)%
Net loss	(26,830)	(33,010)	(19)%
Other comprehensive income gain (loss)	(2)	17	(112)%
Comprehensive loss	\$ (26,832)	\$ (32,993)	(19)%

Revenue. Revenue for the year ended December 31, 2018 was \$430,000 as compared to \$329,000 for the same period in 2017, an increase of \$101,000. The increase was primarily attributable to higher sales in the Middle East and Germany of \$190,000 and \$14,000, respectively, offset by a decrease of sales of Neutrolin in other areas of the EU in the amount of \$103,000.

Cost of Sales. Cost of sales for the year ended December 31, 2018 was \$397,000 as compared to \$115,000 for the same period in 2017, an increase of \$282,000. The increase was primarily due to the recognition of additional cost of goods sold for the year ended December 31, 2018 of \$43,000 related to products shipped under warranty in addition to the reduction of the inventory reserve during the year ended December 31, 2017 in the amount of \$327,000, mainly due to longer shelf life of the products manufactured. The increase was partially offset by decreases in packaging and stability studies of \$55,000 and cost of materials of \$33,000, respectively.

Research and Development Expense. R&D expense for the year ended December 31, 2018 was \$18,822,000, a decrease of \$5,664,000 from \$24,486,000 for the same period in 2017. The decrease was primarily attributable to a net decrease in expenses related to the LOCK-IT-100 clinical trial in the U.S. of \$3,734,000, mainly due to the confidential settlement agreement with our CRO. Additionally, there were also decreases in costs related to manufacturing process development activities of \$2,359,000, due to the completion or cancelation of majority of the projects, and reduced activity related to antimicrobial sutures, nanofiber webs, wound management and osteoarthritis and visco-supplementation of \$566,000. These decreases were partially offset by a \$1,001,000 increase in personnel expenses, mainly due to the hiring of new staff supporting the LOCK-IT-100 trial.

Selling, General and Administrative Expense . SG&A expense for the year ended December 31, 2018 was \$8,075,000, a decrease of \$577,000 from \$8,652,000 for the same period in 2017. The decrease was primarily attributable to a decrease in non-cash charge for stock-based compensation expense of \$511,000, due to non-achievement of performance conditions related to certain stock options which resulted in a reversal of expense of \$306,000; and a reduction of consulting fees of \$437,000, mainly due to executive search fees that were incurred in 2017. These decreases, among others of lesser significance, were partially offset by a \$162,000 increase in legal fees, mainly due to fees related to the settlement agreement with our CRO, a \$138,000 increase in costs related to marketing research studies, a \$44,000 increase in personnel expenses, and an increase in business development activities of \$30,000.

Interest Income. Interest income for the year ended December 31, 2018 was \$37,000, a decrease of \$74,000 from \$111,000 for the same period in 2017. The decrease was attributable to lower average interest-bearing cash balances and short-term investments during 2018 as compared to the same period in 2017.

Foreign Exchange Transaction Gain (Loss). Foreign exchange transaction loss for the year ended December 31, 2017 of \$14,000 was due to the foreign exchange rate fluctuations for the payment of invoices paid in foreign currency. There was minimal foreign exchange transaction loss for the year ended December 31, 2018.

Change in Fair Value of Derivative Liabilities. The change in the value of derivative liabilities for the year ended December 31, 2017 of \$177,000 represented the \$121,000 net change in the fair value of the warrants issued at issuance date (May 3, 2017 public offering) of \$3,733,000 and the estimated fair value of the warrants of \$3,854,000 at August 10, 2017, the date that the warrants were reclassified from liability to equity; and the \$56,000 increase in fair value of the warrants issued related to the backstop agreement at November 16, 2017 issuance date of \$271,000 and the estimated fair value of the warrants of \$327,000 at December 24, 2017, the date that the number of warrants to be issued was determined and were reclassified from liability to equity.

Interest Expense. Interest expense for the year ended December 31, 2018 was \$2,000 as compared to \$6,000 for the same period in 2017, a decrease of \$4,000 due to fees incurred for financing some of 2017 expenditures.

Other Comprehensive Income (Loss). Unrealized foreign exchange movements related to long-term intercompany loans and the translation of the foreign affiliate financial statements to U.S. dollars and unrealized movements related to short-term investment are recorded in other comprehensive income resulting in a \$2,000 loss in 2018 and a \$17,000 gain in 2017.

Liquidity and Capital Resources

Sources of Liquidity

As a result of our cost of sales, R&D and SG&A expenditures and the lack of substantial product sales revenue, we have not been profitable and have generated operating losses since we began operations. During the year ended December 31, 2018, we received net proceeds of \$21,968,000 from the issuance of 35,888,772 shares of common stock under our at-the-market-issuance sales agreement; \$7,391,000 from the issuance of a 10% convertible note; \$26,000 from the exercise of 25,000 warrants; and \$11,600 from the exercise of 40,000 stock options.

Net Cash Used in Operating Activities

Net cash used in operating activities for the year ended December 31, 2018 was \$23,700,000 as compared to \$28,587,000 in 2017, a decrease in net cash use of \$4,887,000. The decrease was primarily attributable to a decrease in net loss of \$6,180,000 driven by decreased research and development expenses due to the benefits received from the settlement agreement with our CRO. The net loss of \$26,830,000 for the year ended December 31, 2018 was higher than cash used in operating activities by \$3,130,000. The difference is primarily attributable to non-cash stock-based compensation of \$1,111,000, and increases in accrued expenses and accounts payable of \$998,000 and \$782,000, respectively, primarily due to the schedule of payments agreed with our CRO in the confidential settlement agreement signed in November 2018.

Net Cash Provided by Investing Activities

Cash provided by investing activities for the year ended December 31, 2018 was \$1,555,000 attributable to the proceeds on the sale of short-term investments of \$1,604,000, offset by the purchase of equipment of \$49,000. In the same period in 2017, net cash provided by investing activities of \$10,358,000 was attributable to the proceeds from the sale of short-term investments used to fund operations of \$23,584,000 offset by \$13,074,000 purchases of short-term investments.

Net Cash Provided by Financing Activities

Net cash provided by financing activities for the year ended December 31, 2018 was \$29,397,000 as compared to \$20,525,000 for the same period in 2017. During 2018, we generated net proceeds of \$21,968,000 from the sale of our common stock in our at-the-market program; \$7,391,000 from issuance of a 10% convertible note; \$26,000 from the exercise of warrants; and \$12,000 from the exercise of stock options. In comparison to the same period in 2017, we generated net proceeds of \$12,798,000 from the public offering of our common stock and warrants; \$5,543,000 from the sale of our common stock in our at-the-market program; \$1,877,000 from the sale of our Series F non-voting preferred stock; \$300,000 from the sale of our common stock from our directors, executive officers and certain employees; and \$7,000 from the exercise of stock options.

Funding Requirements and Liquidity

Our total cash on hand and short-term investments as of December 31, 2018 was \$17,624,000, excluding restricted cash of \$172,000, compared with \$11,984,000 at December 31, 2017. At December 31, 2018, we have approximately \$20.3 million available under our current at-the-market program and approximately \$30.3 million available under our current shelf registration for the issuance of equity, debt or equity-linked securities unrelated to the current ATM program. We expect to utilize our ATM program, if conditions allow, to support our ongoing development of Neutrolin in hemodialysis catheters in the U.S.

Because our business has not generated positive operating cash flow, we will need to raise additional capital in order to continue to fund our research and development activities, as well as to fund operations generally. Our continued operations are focused primarily in activities leading to the preparation and submission of an NDA for Neutrolin to the FDA and will depend on our ability to raise sufficient funds through various potential sources, such as equity, debt financings, and/or strategic relationships. We can provide no assurances that financing or strategic relationships will be available on acceptable terms, or at all.

We expect to continue to fund operations from cash on hand and through capital raising sources as previously described, which may be dilutive to existing stockholders, through revenues from the licensing of our products, or through strategic alliances. We expect to continue to utilize our ATM program, if conditions allow, to support our ongoing funding requirements. Additionally, we may seek to sell additional equity or debt securities through one or more discrete transactions, or enter into a strategic alliance arrangement, but can provide no assurances that any such financing or strategic alliance arrangement will be available on acceptable terms, or at all. Moreover, the incurrence of indebtedness would result in increased fixed obligations and could contain covenants that would restrict our operations. Raising additional funds through strategic alliance arrangements with third parties may require significant time to complete and could force us to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates, or to grant licenses on terms that may not be favorable to us or our stockholders. Our actual cash requirements may vary materially from those now planned due to a number of factors, including the potential necessity to fund an additional Phase 3 clinical trial, if required by the FDA, any change in the focus and direction of our research and development programs, any acquisition or pursuit of development of new product candidates, competitive and technical advances, the costs of commercializing any of our product candidates, and costs of filing, prosecuting, defending and enforcing any patent claims and any other intellectual property rights.

While we expect to grow product sales, we do not anticipate that we will generate significant product revenues in the foreseeable future. In the absence of such revenue, we are likely to continue generating operating cash flow deficits. We will continue to use cash as we close out our Phase 3 clinical trial, and increase other activities leading to the preparation and submission of an NDA to seek marketing approval of Neutrolin in the U.S., and, if required, fund an additional Phase 3 clinical trial for Neutrolin, pursue business development activities, and incur additional legal costs to defend our intellectual property.

Based on the current development plans for Neutrolin and our other operating requirements, we believe that the existing cash and cash equivalents at December 31, 2018, plus the funds raised under our ATM program through the filing date of this report, will be adequate to fund the costs of our operations into the second quarter of 2020. If we are unable to raise additional funds when needed, we may be forced to slow or discontinue our preparations for the commercial launch of Neutrolin, or if required by the FDA, to undertake a second Phase 3 study prior to filing an NDA. We may also be required to delay, scale back or eliminate some or all of our research and development programs. Each of these alternatives would likely have a material adverse effect on our business.

Until the date that none of the preferred stock or warrants that we issued to Elliott Associates, L.P. and Elliott International, L.P in November 2017 as part of the backstop financing are outstanding, we are prohibited from issuing or selling any securities convertible into common stock at a conversion price of below \$0.162 per share on terms more favorable than the backstop financing terms and with a conversion, exchange or exercise price that is based upon and/or varies with the trading prices of or quotations for the shares of our common stock or that is subject to being reset at some future date or upon the occurrence of specified or contingent events directly or indirectly related to our business (other than pursuant to a customary "weighted average" anti-dilution provision) or the market for our common stock or enter into any agreement to sell securities at a future determined price (other than standard and customary "preemptive" or "participation" rights and other than pursuant to an at-the-market offering through a registered broker-dealer). Under certain conditions, this restriction could make raising capital through the sale of equity securities difficult and could have a material adverse impact on our business, financial condition and prospects.

Contractual Obligations

In September 2017, we entered into a sublease agreement for approximately 6,960 square feet of office space in Berkeley Heights, New Jersey, which sublease runs from September 15, 2017 to June 29, 2020. This sublease is rent-free.

As of December 31, 2018, we have no lease obligation.

Critical Accounting Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities and expenses. On an ongoing basis, we evaluate these estimates and judgments, including those described below. We base our estimates on our historical experience and on various other assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results and experiences may differ materially from these estimates.

While our significant accounting policies are more fully described in Note 3 to our financial statements included with this report, we believe that the following accounting policies are the most critical to aid you in fully understanding and evaluating our reported financial results and affect the more significant judgments and estimates that we use in the preparation of our financial statements.

Stock-Based Compensation

We account for stock options according to the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") No. 718, "Compensation — Stock Compensation" ("ASC 718"). Share-based compensation cost is measured at grant date, based on the estimated fair value of the award using a Black-Scholes option pricing model for options with service or performance-based conditions. Stock-based compensation cost is recognized as expense, over the employee's requisite service period on a straight-line basis.

We account for stock options granted to non-employees on a fair value basis using the Black-Scholes option pricing model in accordance with ASC 718 and ASC No. 505-50, "Equity-Based Payments to Non-Employees" ("ASC 505"). The non-cash charge to operations for non-employee options with time-based vesting provisions is based on the fair value of the options remeasured each reporting period and amortized to expense over the related vesting period. The non-cash charge to operations for non-employee options with performance based vesting provisions is recorded when the achievement of the performance condition is probable and remeasured each reporting period until the performance condition is achieved.

Valuations incorporate several variables, including expected term, expected volatility, expected dividend yield and a risk-free interest rate. We estimate the expected term of the options granted based on anticipated exercises in future periods. The expected stock price volatility for the Company's stock options is calculated based on the historical volatility of the Company's common stock. The expected dividend yield reflects our current and expected future policy for dividends on our common stock. To determine the risk-free interest rate, we utilize the U.S. Treasury yield curve in effect at the time of grant with a term consistent with the expected term of our awards which is 5 years for employees and 10 years for non-employees.

Revenue Recognition

We adopted the new revenue recognition, ASC 606, "Revenue from Contracts with Customers", as of January 1, 2018 using the modified retrospective method. ASC 606 prescribes a five-step model for recognizing revenue which includes (i) identifying contracts with customers; (ii) identifying performance obligations; (iii) determining the transaction price; (iv) allocating the transaction price; and (v) recognizing revenue.

We recognize net sales upon shipment of product to the dialysis centers and upon meeting the five-step model prescribed by ASC 606 outlined above.

In October 2015, we shipped product with less than 75% of its remaining shelf life to a customer and issued a guarantee that the specific product shipped would be replaced by us if the customer was not able to sell the product before it expired. As a result of this warranty, we may have an additional performance obligation (i.e. accept returned product and deliver new product to the customer) if the customer is unable to sell the short-dated product. As a result of the adoption of ASC 606, we accelerated the recognition of the deferred revenue and related cost of sales in the net amount of \$70,500 and recorded the warranty obligation in the amount of \$52,900 upon adoption.

Deferred Revenue

In August 2014, we entered into an exclusive distribution agreement (the "Wonik Agreement") with Wonik Corporation, a South Korean company, to market, sell and distribute Neutrolin for hemodialysis and oncolytic patients upon receipt of regulatory approval in Korea. Upon execution, Wonik paid us a non-refundable \$50,000 payment and will pay an additional \$50,000 upon receipt of the product registration necessary to sell Neutrolin in the Republic of Korea (the "Territory"). The term of the Wonik Agreement commenced on August 8, 2014 and will continue for three years after the first commercial sale of Neutrolin in the Territory. The non-refundable up-front payment has been recorded as deferred revenue and will be recognized as revenue on a straight-line basis over the contractual term of the Agreement. Deferred revenue related to the Wonik agreement at December 31, 2018 and 2017 amounted to approximately \$11,000 and \$20,000, respectively.

Inventory Valuation

We engage third parties to manufacture and package inventory held for sale and warehouse such goods until packaged for final distribution and sale. Inventories are stated at the lower of cost or net realizable value with cost determined on a first-in, first-out basis. Inventories are reviewed periodically to identify slow-moving or obsolete inventory based on sales activity, both projected and historical, as well as product shelf-life. In evaluating the recoverability of our inventories, we consider the probability that revenue will be obtained from the future sale of the related inventory and, if required, will write down inventory quantities in excess of expected requirements. Expired inventory is disposed of and the related costs are recognized as cost of product sales in our consolidated statements of operations.

We analyze our inventory levels to identify inventory that may expire prior to sale, inventory that has a cost basis in excess of its estimated realizable value, or inventory in excess of expected sales requirements. Although the manufacturing of our products is subject to strict quality controls, certain batches or units of product may no longer meet quality specifications or may expire, which would require adjustments to our inventory values.

In the future, reduced demand, quality issues or excess supply beyond those anticipated by management may result in an adjustment to inventory levels, which would be recorded as an increase to cost of product sales. The determination of whether or not inventory costs will be realizable requires estimates by our management. A critical input in this determination is future expected inventory requirements based on our internal sales forecasts which we then compare to the expiry dates of inventory on hand. To the extent that inventory is expected to expire prior to being sold, we will write down the value of inventory. If actual results differ from those estimates, additional inventory write-offs may be required.

Short-Term Investments

We determine the appropriate classification of marketable securities at the time of purchase and reevaluate such designation as of each balance sheet date. Investments in marketable debt and equity securities classified as available-for-sale are reported at fair value. Fair values of our investments are determined using quoted market prices in active markets for identical assets or liabilities or quoted prices for similar assets or liabilities or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Our marketable securities are highly liquid and consist of U.S. government agency securities, high-grade corporate obligations and commercial paper with maturities of more than 90 days but less than 12 months. Changes in fair value that are considered temporary are reported net of tax in other comprehensive income (loss). Realized gains and losses, amortization of premiums and discounts and interest and dividends earned are included in income (expense) on the condensed consolidated statements of operations and comprehensive income (loss). The cost of investments for purposes of computing realized and unrealized gains and losses is based on the specific identification method. Investments with maturities beyond one year, if any, are classified as short-term based on management's intent to fund current operations with these securities or to make them available for current operations. For declines, if any, in the fair value of equity securities that are considered other-than-temporary, impairment losses are charged to other (income) expense, net. We consider available evidence in evaluating potential impairments of our investments, including the duration and extent to which fair value is less than cost and, for equity securities, our ability and intent to hold the investments.

Fair Value Measurements

We categorize our financial instruments into a three-level fair value hierarchy that prioritize the inputs to valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the fair value measurement of the instrument. Financial assets recorded at fair value on our condensed consolidated balance sheets are categorized as follows:

- Level 1 inputs—Observable inputs that reflect guoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 inputs— Significant other observable inputs (e.g., quoted prices for similar items in active markets, quoted prices for identical or similar items in markets that are not active, inputs other than quoted prices that are observable such as interest rate and yield curves, and market-corroborated inputs).
- Level 3 inputs—Unobservable inputs for the asset or liability, which are supported by little or no market activity and are valued based on management's estimates of assumptions that market participants would use in pricing the asset or liability.

Recent Authoritative Pronouncements:

In February 2016, the FASB issued new guidance related to how an entity should lease assets and lease liabilities. The guidance specifies that an entity who is a lessee under lease agreements should recognize lease assets and lease liabilities for those leases classified as operating leases under previous FASB guidance. Accounting for leases by lessors is largely unchanged under the new guidance. The guidance is effective for us beginning in the first quarter of 2019. Early adoption is permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. This adoption on January 1, 2019 did not have a material impact on our consolidated financial statements.

In June 2016, the FASB issued new guidance which replaces the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The guidance is effective for us beginning in the first quarter of fiscal year 2020. Early adoption is permitted beginning in the first quarter of fiscal year 2019. We are evaluating the impact of adopting this guidance on our consolidated financial statements.

In July 2017, the FASB issued new guidance which changes the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features and recharacterizes the indefinite deferral of certain provisions within the guidance for distinguishing liabilities from equity. The guidance is effective for us beginning in the first quarter of fiscal year 2019. Early adoption is permitted. This adoption on January 1, 2019 did not have a material impact on our consolidated financial statements.

In June 2018, the FASB issued a new guidance which expands the scope of ASC 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The guidance is effective for the Company beginning in the first quarter of fiscal year 2019. Early adoption is permitted. This adoption on January 1, 2019 did not have a material impact on our consolidated financial statements.

In August 2018, the FASB issued a new guidance which modifies the disclosure requirements on fair value measurements. The guidance is effective for the Company beginning in the first quarter of fiscal year 2020. Early adoption is permitted. We are assessing the impact of adopting this guidance on our consolidated financial statements.

In November 2018, the FASB issued new guidance to clarify the interaction between the authoritative guidance for collaborative arrangements and revenue from contracts with customers. The new guidance clarifies that, when the collaborative arrangement participant is a customer in the context of a unit-of-account, revenue from contracts with customers guidance should be applied, adds unit-of-account guidance to collaborative arrangements guidance, and requires, that in a transaction with a collaborative arrangement participant who is not a customer, presenting the transaction together with revenue recognized under contracts with customers is precluded. The guidance is effective for us beginning in the first quarter of fiscal year 2020. Early adoption is permitted. We are assessing the impact of adopting this guidance on our consolidated financial statements.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Not applicable.

Item 8. Financial Statements and Supplementary Data

See the financial statements included at the end of this report beginning on page F-1.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

As of the end of the period covered by this Annual Report on Form 10-K, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in the Exchange Act Rules 13a-15(e) and 15d-15(e)) (the "Exchange Act"). Based on the foregoing evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during our fourth quarter ended December 31, 2018, or in other factors that could significantly affect these controls, that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Management's Annual Report on Internal Controls Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting and for the assessment of the effectiveness of internal control over financial reporting. As defined by the Securities and Exchange Commission, internal control over financial reporting is a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements in accordance with U.S. generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In connection with the preparation of our annual consolidated financial statements, management, including, our Chief Executive Officer and Chief Financial Officer, have undertaken an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2018, based on the criterial established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of those controls.

Based on this evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2018.

This annual report does not include an attestation report of our independent registered public accounting firm regarding the effectiveness of our internal control over financial reporting because we are a smaller reporting company.

Item 9B. Other Information

Not applicable.

PART III

Item 10. Directors, Executive Officers, and Corporate Governance

We have adopted a written Code of Conduct and Ethics that applies to our directors, executive officers and all employees. We intend to disclose any amendments to, or waivers from, our code of ethics and business conduct that are required to be publicly disclosed pursuant to rules of the SEC by filing such amendment or waiver with the SEC. This code of ethics and business conduct can be found in the "Investors - Corporate Governance" section of our website, www.cormedix.com.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our directors, executive officers and holders of more than 10% of our common stock to file with the SEC initial reports of ownership and reports of changes in the ownership of our common stock and other equity securities. Such persons are required to furnish us copies of all Section 16(a) filings. Based solely upon a review of the copies of the forms furnished to us, we believe that our officers, directors and holders of more than 10% of our common stock complied with all applicable filing requirements during the fiscal year ended December 31, 2018, with the exception of: a Form 4 for Janet Dillione to report the grant on February 21, 2018 of 15,357 restricted stock units that was due on February 23, 2018 and was filed on March 22, 2018; a Form 4 for Myron Kaplan to report the grant of 10,000 restricted stock units on February 21, 2018 that was due on February 23, 2018 and was filed on March 22, 2018 and a Form 4 for Mr. Kaplan to report the grant of 5,000 restricted stock units on November 6, 2018 that was due on November 8, 2018 and was filed on November 27, 2018; a Form 4 for John Armstrong to report the vesting of 18,028 restricted stock units on December 31, 2017 that was due on January 2, 2018 and was filed on March 22, 2018 and a Form 4 for Mr. Armstrong to report the vesting of 18,029 restricted stock units on December 31, 2018 that was due on January 2, 2019 and was filed on April 9, 2018 and a Form 4 for Ms. Masson to report the firing as an executive officer on March 19, 2018 that was due on March 29, 2018 and was filed on April 9, 2018.

Directors

The following table sets forth the name, age and position of each of our directors as of December 31, 2018:

Name	Age	Director Since	Position(s) with CorMedix
Khoso Baluch	60	October 2016	Director and Chief Executive Officer
Janet M. Dillione	58	August 2015	Director
Gary Gelbfish (1)	59	August 2017	Director
Myron Kaplan	73	April 2016	Chairman of the Board
Mehmood Khan	60	June 2017	Director
Steven Lefkowitz	62	June 2017	Director

(1) Dr. Gelbfish resigned as a director on January 14, 2019.

Khoso Baluch joined our Board in October 2016 upon his appointment as our Chief Executive Officer. Mr. Baluch previously served as Senior Vice President and President Europe, Middle East & Africa EMEA of UCB, SA, or UCB, from January 2015 to early 2016, Senior Vice President and President of the European Region of UCB from February 2013 to December 2014, and Senior Vice President and Chief Marketing Officer of UCB from January 2010 to February 2013. Prior to joining UCB, Mr. Baluch worked for Eli Lilly & Co for 24 years, holding international positions spanning Europe, the Middle East and the United States in general management, business development, market access and product leadership. He has served as an independent director of Poxel SA, a French publicly traded biotech company, since 2013. Mr. Baluch holds a BSc in Aeronautical Engineering from City University London and a Masters of Business Administration from Cranfield School of Management. Among other qualifications, attributes and skills, Mr. Baluch's business expertise and significant executive management experience in the pharmaceutical industry led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.

Janet M. Dillione has been a director of CorMedix since August 2015. Ms. Dillione has served as the Chief Executive Officer of Bernoulli (formerly known as Cardiopulmonary Corp.), a leader in medical device connectivity for EMR integration, and integrated clinical applications and workflows for over 20 years, since 2014. Previously, she was at Nuance Communications, Inc., a leading provider of voice and language solutions for businesses and consumers around the world, having joined Nuance in April 2010 as Executive Vice President and General Manager of the Healthcare Division and serving as an executive officer from May 2010 until March 2014. From June 2000 to April 2010, Ms. Dillione held several senior level management positions at Siemens Medical Solutions, a global leader in medical imaging, laboratory diagnostics, and healthcare information technology, including President and CEO of the global healthcare IT division. Ms. Dillione received her B.A. from Brown University in 1981 and completed the Executive Program at The Wharton School of Business of the University of Pennsylvania in 1995. She has over 25 years of experience leading global teams in the development and delivery of healthcare technology and services. Among other qualifications, attributes and skills, Ms. Dillione's financial expertise and significant executive management experience with medical device and healthcare companies led to the conclusion of our Board that she should serve as a director of our company in light of our business and structure.

Myron Kaplan became a director of CorMedix in April 2016. On August 3, 2017, he was elected as our Chairman of the Board. Mr. Kaplan is a founding partner of Kleinberg, Kaplan, Wolff & Cohen, P.C., a New York City general practice law firm, where he has practiced corporate and securities law for more than forty years. In 2012, Mr. Kaplan became a trustee of the Lehman Brothers Plan Holding Trust. Previously, he served as a member of the board of directors of SAirGroup Finance (USA) Inc., a subsidiary of SAirGroup that had publicly issued debt securities, Trans World Airlines, Inc. and Kitty Hawk, Inc. Among his business and civic involvements, Mr. Kaplan currently serves on the boards of directors of a number of private companies and has been active for many years on the Boards of Trustees and various board committees of The Children's Museum of Manhattan and JBI International (formerly The Jewish Braille Institute of America). Mr. Kaplan graduated from Columbia College and holds a Juris Doctor from Harvard Law School. Among other experience, qualifications, attributes and skills, Mr. Kaplan's experience in a broad range of corporate and securities matters and service as a director of public companies led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.

Mehmood Khan, M.D. became a director of CorMedix in June 2017. Dr. Khan currently serves as the Chief Executive Officer of Life BioSciences Inc., a private company focused on age-related decline, a position he has held since March 2019. Prior to that, Dr. Khan served as Vice Chairman (from January 2015 to March 2019) and Chief Scientific Officer of Global Research and Development (from December 2007 to March 2019) for PepsiCo, where he led global R&D and oversees the company's 2025 sustainability agenda, which included plans for the further transformation of its current food and beverage portfolio as well as expansion of offerings containing positive nutrition with a focus on reaching more underserved communities and consumers with healthier choices. Prior positions at PepsiCo included Chief Executive Officer, Global Nutrition Group from January 2011 to September 2013. Previously, Dr. Khan served as Head of Medical Affairs and then President of Takeda Pharmaceuticals' Global Research & Development Center from January 2002 to December 2007. Earlier in his career Dr. Khan was a faculty member at the Mayo Clinic and Mayo Medical School in Rochester, Minnesota, serving as Director of the Diabetes, Endocrine and Nutritional Trials Unit in the division of endocrinology. Prior to the Mayo Clinic, Dr. Khan spent nine years leading programs in diabetes, endocrinology, metabolism, and nutrition for the Hennepin County Medical Center in Minneapolis. His practice included extensive work with patients with diabetes requiring hemodialysis as well as parenteral nutrition. Dr. Khan also currently serves as a member of the board of directors for HemoShear Therapeutics, a biotechnology company focused on discovering novel biological targets and developing drugs to treat rare juvenile metabolic disorders, and Reckett Benckhiser Group, a British private company. He earned his medical degree from the University of Liverpool Medical School, England. Among other qualifications, attributes and skills, Dr. Khan's business expertise and

Steven Lefkowitz was a director of CorMedix from August 2011 to June 2016. He was reappointed to the Board in June 2017. He also served as our acting Chief Financial Officer from August 2013 to July 2014. Mr. Lefkowitz has been the President and Founder of Wade Capital Corporation, a financial advisory services company, since June 1990. Mr. Lefkowitz has been a director of both public and private companies. He has served as a director AIS, RE., a privately held reinsurance company since 2001. Mr. Lefkowitz received his A.B. from Dartmouth College in 1977 and his M.B.A. from Columbia University in 1985. Among other experience, qualifications, attributes and skills, Mr. Lefkowitz's education, experience and financial expertise led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.

On February 27, 2019, our Board of Directors appointed Alan W. Dunton, M.D., as a director, effective March 1, 2019, to serve until the 2019 annual meeting or until his respective successor is duly elected and qualified. In 2006, Dr. Duncan founded Danerius, LLC, a biotechnology and pharmaceutical consulting business. Prior to starting Danerius, he was Chief Executive Officer of Panacos Pharmaceuticals, Inc., as well as Metaphore Pharmaceuticals, Inc., both biotechnology companies. He was also President and Managing Director of the Janssen Research Foundation, the research and development and regulatory arm of the pharmaceuticals division at Johnson and Johnson. Dr. Dunton received his Bachelor of Science degree in biochemistry, magna cum laude, from State University of New York at Buffalo, and received his M.D. from New York University School of Medicine. Dr. Dunton currently serves on the boards of two public companies, Palatin Technologies, Inc. and Oragenics, Inc. He chairs the audit and compensation committees of each of these companies. He is also a member of the board of Cytogel Pharma LLC, a private bio-pharmaceutical development company focused on acquiring promising early-stage programs. Among other qualifications, Dr. Dunton's significant depth of experience in the pharmaceutical industry, including service as a director of public pharmaceutical companies, led to the conclusion of our Board that he should serve as a director of our company in light of our business and structure.

Board Independence

Our Board has undertaken a review of the independence of our directors and has determined that (i) all current directors except Khoso Baluch are independent within the meaning of Section 803A(2) of the NYSE American Rules, (ii) all members of our Audit Committee meet the additional test for independence for audit committee members imposed by SEC regulation and Section 803B(2) of the NYSE American Rules, (iii) all of the members of our Compensation Committee are independent within the meaning of Section 805(c) of the NYSE American Rules, and (iv) all of the members of our Nominating and Governance Committee are independent within the meaning of Section 805(c) of the NYSE American Rules.

Board Committees

Our Board has established an Audit Committee, Compensation Committee and Nominating and Governance Committee. Our Audit Committee currently consists of Mr. Lefkowitz (Chair), Mr. Kaplan and Ms. Dillione. Our Compensation Committee currently consists of Ms. Dillione (Chair), Mr. Lefkowitz and Dr. Khan. Our Nominating and Governance Committee currently consists of Dr. Khan (Chair) and Mr. Kaplan.

Each of the above-referenced committees operates pursuant to a formal written charter. The charters for each committee, which have been adopted by our Board, contain a detailed description of the respective committee's duties and responsibilities and are available on our website at www.cormedix.com under the "Investor Relations—Corporate Governance" tab.

Audit Committee

The Audit Committee monitors our corporate financial statements and reporting and our external audits, including, among other things, our internal controls and audit functions, the results and scope of the annual audit and other services provided by our independent registered public accounting firm and our compliance with legal matters that have a significant impact on our financial statements. The Audit Committee also consults with our management and our independent registered public accounting firm prior to the presentation of financial statements to stockholders and, as appropriate, initiates inquiries into aspects of our financial affairs. The Audit Committee is responsible for establishing procedures for the receipt, retention and treatment of complaints regarding accounting, internal accounting controls or auditing matters, and for the confidential, anonymous submission by our employees of concerns regarding questionable accounting or auditing matters. In addition, the Audit Committee is directly responsible for the appointment, retention, compensation and oversight of the work of our independent registered public accounting firm, including approving services and fee arrangements. All related party transactions will be approved by the Audit Committee before we enter into them.

Both our independent registered public accounting firm and internal financial personnel regularly meet with, and have unrestricted access to, the Audit Committee.

The Board has determined that each of Steven Lefkowitz (Chair) and Janet Dillione qualifies as an "audit committee financial expert" as that term is defined in the rules and regulations of the SEC. The designation of each of Mr. Lefkowitz and Ms. Dillione as an "audit committee financial expert" does not impose on them any duties, obligations or liability that are greater than those that are generally imposed on them as a member of the Audit Committee and the Board, and their designation as an "audit committee financial expert" pursuant to this SEC requirement does not affect the duties, obligations or liability of any other member of the Audit Committee or the Board.

Compensation Committee

The Compensation Committee reviews and approves our compensation policies and all forms of compensation to be provided to our executive officers and directors, including, among other things, annual salaries, bonuses, and other incentive compensation arrangements. In addition, the Compensation Committee administers our stock option and employee stock purchase plans, including granting stock options to our executive officers and directors. The Compensation Committee also reviews and approves employment agreements with executive officers and other compensation policies and matters.

Each member of the Compensation Committee is a non-employee director, as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an outside director, as defined pursuant to Section 162(m) of the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code").

Nominating and Governance Committee

The Nominating and Governance Committee identifies, evaluates and recommends nominees to the Board and committees of the Board, conducts searches for appropriate directors and evaluates the performance of the Board and of individual directors. The Nominating and Governance Committee also is responsible for reviewing developments in corporate governance practices, evaluating the adequacy of our corporate governance practices and reporting and making recommendations to the Board concerning corporate governance matters.

Executive Officers

The following table sets forth information concerning our current executive officers:

Name	Age	Position(s) with CorMedix
Khoso Baluch	61	Chief Executive Officer
Robert Cook	63	Chief Financial Officer
John Armstrong	75	Executive Vice President for Technical Operations
Elizabeth Masson	40	Executive Vice President and Head of Clinical Operations

See the biography for Khoso Baluch under "Directors."

Robert Cook most recently served as Chief Financial Officer of Bioblast Pharma Ltd. from January 2016 to July 2016. His prior pharma experience includes: Executive Vice President and Chief Financial Officer at Strata Skin Sciences, Inc. from April 2014 to January 2016; Senior Vice President and Chief Financial Officer at Immune Pharmaceuticals, Inc. from August 2013 to March 2014, and its predecessor EpiCept Corporation from April 2004 to August 2013, including one year as Interim President and CEO of EpiCept in which he completed the reverse merger of EpiCept into Immune. Previously he served as CFO of publicly-held Pharmos Corporation. Mr. Cook began his career in financial services at Chase Manhattan and he also held a position as a Vice President in the Healthcare Group at General Electric Capital Commercial Finance. Mr. Cook holds a B.S. in Finance, magna cum laude, from The American University, in Washington, DC.

John Armstrong became our Executive Vice President for Technical Operations in March 2017. Prior to that, he was been employed by us as a consultant beginning in November 2014, performing the same services that he now performs as our Executive Vice President for Technical Operations. John has over 45 years' experience in the pharmaceutical industry with broad senior level cross functional experience and has held a number of General Management positions. Most recently, from August 2010 to January 2013, he was President, Operations for Correvio, a private pharmaceutical company supplying product to over 50 countries, and prior positions include President/CEO of Genaera Corporation, Sr. Vice President of Urocor Corporation, CEO of Mills Biopharma, President of Oread CMO, President of Endo Laboratories (subsidiary of DuPont Merck), President of World-wide Manufacturing for DuPont Merck Pharmaceuticals, Vice President Operations for Marion/ Marion Merrill Dow, and held varied roles in Manufacturing, QA, Led Integrated business systems development for three companies as well as having expertise in business development. Mr. Armstrong holds an executive M.B.A. from Century University. He is also a CPIM (Certified in Production and Inventory Management).

Elizabeth Masson became our Executive Vice President and Head of Clinical Operations in March 2018. Prior to her employment with us, Ms. Masson had been providing us clinical operations expertise as a consultant beginning in late November 2017. Before she began her consulting career, she held several progressive management roles in clinical operations, most recently at Gemphire Therapeutics, as Vice President, Clinical Operations. Ms. Masson received her B.A. in Leadership and Organizational Management from Bay Path College.

DIRECTOR COMPENSATION

Director Compensation in Fiscal 2018

The following table shows the compensation earned by each non-employee director of our company for the year ended December 31, 2018.

		Option		
	Fees Earned	Awards (1) (2)	Restricted Units	
Name	(\$)	(\$)	Awards (1) (3) (\$)	Total (\$)
Janet M. Dillione	30,000(4)	16,440	7,980	54,420
Gary Gelbfish (5)	235,000 ₍₅₎	16,440	5,700	257,140
Myron Kaplan	30,000	16,440	24,440	70,880
Mehmood Khan	30,000	16,440	7,125	53,565
Steven Lefkowitz	30,000	16,440	21,020	67,460

- (1) The amounts included in this column are the dollar amounts representing the full grant date fair value of each stock option award calculated in accordance with FASB ASC Topic 718 and do not represent the actual value that may be recognized by the directors upon option exercise. For information on the valuation assumptions used in calculating this amount, see Note 8 to our audited financial statements included in this Annual Report on Form 10-K.
- (2) As of December 31, 2018, the number of shares underlying options held by each non-employee director was as follows: 225,000 shares for Ms. Dillione; 115,000 shares for Dr. Gelbfish; 130,000 shares for Mr. Kaplan; 115,000 shares for Dr. Khan; and 115,000 shares for Mr. Lefkowitz.
- (3) As of December 31, 2018, the number of restricted stock units held by each non-employee director was as follows: 2,334 shares for Ms. Dillione; 1,667 shares for Dr. Gelbfish; 12,001 shares for Mr. Kaplan; 2,084 shares for Dr. Khan; and 11,001 shares for Mr. Lefkowitz.
- (4) Includes fees of \$30,000 for Ms. Dillione that were deferred. See "Directors Compensation Plan" below for a description of the deferral plan pursuant to which the deferrals were made.
- (5) Fees earned for 2018 include \$25,000 as a director and \$210,000 as a consultant. Also see "Related Party Transactions" below. Dr. Gelbfish resigned as a director on January 14, 2019.

Director Compensation Plan

In late 2016 and again in late 2018, with the assistance of Frederic W. Cook & Co., the Compensation Committee reviewed a peer group of 14 public companies, which group was used by Frederic W. Cook & Co. to conduct a compensation study for purposes of establishing director compensation. The composition of the peer group was based on the following criteria: (i) companies operating in a similar industry sector, (ii) publicly traded companies, (iii) companies of similar size, and (iv) companies of similar business operation and stage of research and development. The Compensation Committee also used this data in various combinations in an effort to establish director compensation that reflects our particular facts and circumstances.

Based on the information presented by Frederic W. Cook & Co., in February 2017, we adopted the following cash and equity compensation plan for nonemployee directors. In December 2018, we increased several elements of non-employee director compensation, effective January 1, 2019, as reflected below. Each director receives an annual cash fee of \$25,000, the Board Chair and committee Chairs each receives an additional \$5,000. Upon a director's first election to the Board, he or she will be granted an option to purchase 75,000 (increased to 100,000) shares of our common stock that vest one third each on the date of grant and the first and second anniversary of the date of grant, subject to continued service on the Board through the vesting date. In the next calendar year after his or her election to the Board and annually thereafter, each director will be granted (i) an option to purchase 40,000 (increased to 75,000) shares of our common stock that vest monthly over one year after the date of grant, subject to continued service on the Board through the vesting date, and (ii) restricted stock units in the amount of the lesser of 10,000 units or \$25,000 divided by our stock price on the date of grant (increased to 12,500 and \$25,000), with the Board chair receiving an additional number of restricted stock units in the amount of the lesser of 12,000 units or \$24,000 divided by our stock price on the date of grant (increased to 15,000 and \$30,000), the Audit Committee chair receiving an additional number of restricted stock units in the amount of the lesser of 6,000 units or \$12,000 divided by our stock price on the date of grant (increased to 7,500 and \$15,000), the Compensation Committee chair receiving an additional number of restricted stock units in the amount of the lesser of 4,000 units or \$8,000 divided by our stock price on the date of grant (increased to 5,000 and \$10,000), and the Nomination and Governance Committee chair receiving an additional number of restricted stock units in the amount of the lesser of 2,500 units or \$5,000 divided by our stock price on the date of grant (increased to 3,000 and \$6,000). In addition, in September 2018, we formed the Strategic Finance Committee, which has two co-chairs each of whom, beginning with fiscal year 2019, receives an annual cash fee of \$5,000 and restricted stock units in the amount of the lesser of 5,000 units or \$10,000 divided by our stock price on the date of grant. Restricted stock units vest monthly over one year after the grant date, subject to continued service on the Board through the vesting date.

The exercise price per share of each stock option granted to our non-employee directors is equal to the fair market value of our common stock as determined in good faith by our Board on the date of the grant.

In July 2014, we adopted a Deferred Compensation Plan for Directors, pursuant to which our non-employee directors may defer all of their cash director fees and restricted stock units. Any cash fees due a participating director will be converted into a number of shares of our common stock by dividing the dollar amount of fees payable by the closing price of our common stock on the date such fees would be payable, and the director's unfunded account would be credited with the shares. The shares that accumulate in a director's account will be paid to the director on the tenth business day in January following the year in which the director's service terminates for whatever reason, other than death, in which case the account will be paid within 30 days of the date of death to the designated beneficiaries, if any. If there are no designated beneficiaries, the account will be paid out the same as with any other termination of service. In the event of a change in control of our company, the director would receive cash in an amount equal to the number of shares in the account multiplied by the fair market value of our common stock on the change in control date, and the payment would be accelerated to five business days after the effective date of the change in control.

EXECUTIVE COMPENSATION

Components of Compensation

The key components of our executive compensation package are cash compensation (salary and annual bonuses), long-term equity incentive awards and change in control and other severance agreements. These components are administered with the goal of providing total compensation that recognizes meaningful differences in individual performance, is competitive, varies the opportunity based on individual and corporate performance, and is valued by our Named Executive Officers.

Base Salary

It is the Compensation Committee's objective to set a competitive rate of annual base salary for each Named Executive Officer. The Compensation Committee believes competitive base salaries are necessary to attract and retain top quality executives, since it is common practice for public companies to provide their named executive officers with a guaranteed annual component of compensation that is not subject to performance risk. The Compensation Committee, on its own or with outside consultants, may establish salary ranges for the Named Executive Officers, with minimum to maximum opportunities that cover the normal range of market variability. The actual base salary for each Named Executive Officer is then derived from those salary ranges based on his responsibility, tenure and past performance and market comparability. Annual base salaries for the Named Executive Officers are reviewed and approved by the Compensation Committee in the first quarter following the end of the previous performance year. Changes in base salary are based on the scope of an individual's current job responsibilities, individual performance in the previous performance year, target pay position relative to the peer group, and our salary budget guidelines. The Compensation Committee reviews established goals and objectives, and determines an individual's achievement of those goals and objectives and considers the recommendations provided by the Chief Executive Officer to assist it in determining appropriate salaries for the Named Executive Officers other than the Chief Executive Officer.

The base salary information for our Named Executive Officers for 2017 and 2018 is set forth in the Summary Compensation Table below. In October 2016, February 2017, March 2017, and March 2018, respectively, we entered into an employment agreement with each of Khoso Baluch, our Chief Executive Officer, Robert Cook, our Chief Financial Officer, John Armstrong, our Executive Vice President for Technical Operations, and Elizabeth Masson, our Executive Vice President and Head of Clinical Operations. These agreements provide for a salary for each Named Executive Officer and are described under the caption "Employment Agreements."

Annual Bonuses

As part of their compensation package, our Named Executive Officers generally have the opportunity to earn annual non-equity incentive bonuses. Annual non-equity bonuses are designed to reward superior executive performance while reinforcing our short-term strategic operating goals. The Compensation Committee establishes each year a target award for each Named Executive Officer based on a percentage of base salary, and based on any applicable terms in any individual employment agreements. Annual bonus targets as a percentage of salary increase with executive rank so that for the more senior executives, a greater proportion of their total cash compensation is contingent upon annual performance.

At the beginning of the performance year, each Named Executive Officer, in conjunction with the Chief Executive Officer, establishes annual goals and objectives. Actual bonus awards are based on an assessment against the pre-established goals for each Named Executive Officer's individual performance, the performance of the business function for which he is responsible, the executive management team's overall performance, and/or our company's overall performance for the year. For any given performance year, proposed annual bonuses may range from 0% to 100% of target, or higher under certain circumstances, based on corporate, team and individual performance. Corporate, team and individual performance has a significant impact on the annual bonus amounts because the Compensation Committee believes it is a precise measure of how the Named Executive Officer contributed to business results.

Pursuant to their respective employment agreements, Mr. Baluch, Mr. Cook, Mr. Armstrong and Ms. Masson are each eligible for an annual bonus, which may equal up to 80%, 30%, 35% and 30%, respectively, of his or her base salary then in effect, as determined by our Board or compensation committee. In determining such bonus, our Board or compensation committee will take into consideration the achievement of specified company objectives, predetermined by the Board in consultation with the Chief Executive Officer, and specified personal objectives, predetermined by the Board and the Chief Executive Officer.

Long-Term Incentive Equity Awards

We believe that long-term performance is achieved through an ownership culture that encourages high performance by our Named Executive Officers through the use of stock-based awards. Our 2006 Stock Plan and 2013 Stock Plan were each established to provide our employees, including our Named Executive Officers, with incentives to help align employees' interests with the interests of our stockholders. Effective upon the approval by our stockholders of our 2013 Stock Plan, we were no longer able to issue any award under the 2006 Stock Plan. The Compensation Committee believes that the use of stock-based awards offers the best approach to achieving our compensation goals. We have historically elected to use stock options as the primary long-term equity incentive vehicle; however, the Compensation Committee has used restricted stock in the past and may in the future utilize restricted stock as part of our long-term incentive program. We have selected the Black-Scholes method of valuation for share-based compensation. Due to the early stage of our business and our desire to preserve cash, we may provide a greater portion of total compensation to our Named Executive Officers through stock options and restricted stock grants than through cash-based compensation. The Compensation Committee generally oversees the administration of our 2006 Stock Plan and our 2013 Stock Plan.

Stock Options

Our 2013 Stock Plan (and formerly our 2006 Stock Plan) authorizes us to grant options to purchase shares of common stock to our employees, directors and consultants.

The Compensation Committee reviews and approves stock option awards to Named Executive Officers based upon a review of competitive compensation data, its assessment of individual performance, a review of each Named Executive Officer's existing long-term incentives, and retention considerations. Periodic stock option grants are made at the discretion of the Compensation Committee to eligible employees and, in appropriate circumstances, the Compensation Committee considers the recommendations of our Chief Executive Officer.

Stock options granted to employees have an exercise price equal to the fair market value of our common stock on the day of grant, typically vest over a time or upon the achievement of certain performance-based milestones and are based upon continued employment, and generally expire 10 years after the date of grant. The fair value of the options granted to the Named Executive Officers in the Summary Compensation Table is determined in accordance with the Black-Scholes method of valuation for share-based compensation. Incentive stock options also include certain other terms necessary to ensure compliance with the Internal Revenue Code of 1986.

We expect to continue to use stock options as a long-term incentive vehicle because:

- Stock options align the interests of our Named Executive Officers with those of our stockholders, supporting a pay-for performance culture, foster
 employee stock ownership, and focus the management team on increasing value for our stockholders.
- Stock options are performance-based. All of the value received by the recipient of a stock option is based on the growth of the stock price. In addition, stock options can be issued with vesting based on the achievement of specified milestones.
- Stock options help to provide balance to the overall executive compensation program as base salary and annual bonuses focus on short-term compensation, while the vesting of stock options increases stockholder value over the longer term.

• The vesting period of stock options encourages executive retention and the preservation of stockholder value. In determining the number of stock options to be granted to our Named Executive Officers, we take into account the individual's position, scope of responsibility, ability to affect profits and stockholder value and the individual's historic and recent performance and the value of stock options in relation to other elements of the individual Named Executive Officer's total compensation.

Restricted Stock

Our 2013 Stock Plan (and formerly our 2006 Stock Plan) authorizes us to grant restricted stock. Restricted stock grants were awarded to John Armstrong in 2017 and are included in the summary compensation table. In order to implement our long-term incentive goals, we may grant shares of restricted stock in the future.

Executive Benefits and Perquisites

Our Named Executive Officers, some of whom may be parties to employment or consulting agreements, will continue to be parties to such agreements in their current form until the expiration or termination of the employment or consulting agreement or until such time as the Compensation Committee determines in its discretion that revisions to such agreements are advisable. In addition, consistent with our compensation philosophy, we intend to continue to maintain our current benefits for our Named Executive Officers, including medical, dental and life insurance and the ability to contribute to a 401(k) plan; however, the Compensation Committee in its discretion may revise, amend or add to the officer's executive benefits if it deems it advisable. We believe these benefits are currently comparable to benefit levels for comparable companies.

Employment Agreements

Employment Agreements with Current Named Executive Officers

On September 27, 2016, we entered into an employment agreement with Khoso Baluch, our Chief Executive Officer. On January 30, 2017, we entered into an employment agreement, effective February 1, 2017, with Robert Cook to serve as our Chief Financial Officer. On March 1, 2017, we entered into an employment agreement with John Armstrong to serve as our Executive Vice President for Technical Operations. On March 19, 2018, we entered into an employment agreement with Elizabeth Masson to serve as our Executive Vice President and Head of Clinical Operations. After the initial three-year term of each employment agreement, the agreement will automatically renew for additional successive one-year periods, unless either party notifies the other in writing at least 90 days before the expiration of the then current term that the agreement will not be renewed.

Pursuant to their respective agreements, Mr. Baluch will receive an annual salary of \$375,000, Mr. Cook an annual salary of \$350,000, Mr. Armstrong an annual salary of \$310,000 and Ms. Masson an annual salary of \$280,000, which cannot be decreased unless all officers and/or members of our executive management team experience an equal or greater percentage reduction in base salary and/or total compensation, provided that any reduction in executive's salary may be no greater than 25%. Each executive will be eligible for an annual bonus, which may equal up to 80% for Mr. Baluch, up to 30% for Mr. Cook, up to 35% for Mr. Armstrong and up to 30% for Ms. Masson, of his or her base salary then in effect, as determined by our Board or the Compensation Committee will take into consideration the achievement of specified company objectives, predetermined by our Board and Chief Executive Officer, in the case of Mr. Baluch, and by our Chief Executive Officer in the case of Mr. Cook, Mr. Armstrong and Ms. Masson, and approved by the Board or the Compensation Committee, and specified personal objectives, predetermined by the Board with each executive. For fiscal year 2017, Mr. Cook's and Mr. Armstrong's bonuses were prorated, and for fiscal 2018, Ms. Masson's bonus was prorated, contingent upon each meeting performance objectives established by the Board with the executive. Each executive must be employed through December 31 of a given year to earn that year's annual bonus.

The following provisions of the employment agreements with Mr. Baluch, Mr. Cook, Mr. Armstrong and Ms. Masson are identical except where noted.

If we terminate the executive's employment for Cause (as defined below), the executive will be entitled to receive only the accrued compensation due to him or her as of the date of such termination, rights to indemnification and directors' and officers' liability insurance, and as otherwise required by law. All unvested shares of restricted stock in the case of Mr. Baluch, and all unvested options then held by the executive will be forfeited to us as of such date.

If we terminate the executive's employment other than for Cause, death or disability, other than by notice of nonrenewal, or if the executive resigns for Good Reason (as defined below), the executive will receive the following benefits: (i) payment of any accrued compensation and any unpaid bonus for the prior year, as well as rights to indemnification and directors' and officers' liability insurance and any rights or privilege otherwise required by law; (ii) we will continue to pay his or her base salary and benefits for a period of twelve months in the case of Mr. Baluch and nine months for the other executives following the effective date of the termination of employment; (iii) payment on a prorated basis for any target bonus for the year of termination based on the actual achievement of the specified bonus objectives; (iv) if the executive timely elects continued health insurance coverage under COBRA, then we will pay the premium to continue such coverage for him or her and his or her eligible dependents in an amount equal to the portion paid for by us during the executive's employment until the conclusion of the time when he or she is receiving continuation of base salary payments or until he or she becomes eligible for group health insurance coverage under another employer's plan, whichever occurs first, provided however that we have the right to terminate such payment of COBRA premiums on behalf of the executive and instead pay him a lump sum amount equal to the COBRA premium times the number of months remaining in the specified period if we determine in our discretion that continued payment of the COBRA premiums is or may be discriminatory under Section 105(h) of the Internal Revenue Code of 1986, as amended; and (v) in the case of Mr. Baluch, all restricted shares and stock options, and in the case of Mr. Cook and Ms. Masson, all unvested time-based stock options that are scheduled to vest on or before the next succeeding anniversary of the date of termination shall be accelerated and deemed to have vested as of the termination date. The separation benefits set forth above are conditioned upon the executive executing a release of claims against us, our parents, subsidiaries and affiliates and each such entities' officers, directors, employees, agents, successors and assigns in a form acceptable to us, within a time specified therein, which release is not revoked within any time period allowed for revocation under applicable law.

For purposes of the agreement, "Cause" is defined as: (i) the willful failure, disregard or refusal by the executive to perform his or her material duties or obligations under the agreement (other than as a result of executive's mental incapacity or illness, as confirmed by medical evidence provided by a physician selected by us) that, in the case of Mr. Cook, Mr. Armstrong and Ms. Masson, is not cured, to the extent subject to cure, by the executive to our reasonable satisfaction within 30 days after we gave written notice thereof to executive; (ii) any willful, intentional or grossly negligent act by the executive having the effect of materially injuring (whether financially or otherwise) our business or reputation or any of our affiliates; (iii) executive's conviction of any felony involving moral turpitude (including entry of a guilty or nolo contendere plea); (iv) the executive's qualification as a "bad actor," as defined by 17 CFR 230.506(a); (v) the good faith determination by the Board, after a reasonable and good-faith investigation by us that the executive engaged in some form of harassment or discrimination prohibited by law (including, without limitation, harassment on the basis of age, sex or race) unless the executive's actions were specifically directed by the Board; (vi) any material misappropriation or embezzlement by the executive of our property or our affiliates (whether or not a misdemeanor or felony); or (vii) material breach by the executive of the agreement that is not cured, to the extent subject to cure, by executive to our reasonable satisfaction within 30 days after we give written notice thereof to the executive (20 days in the case of Mr. Baluch).

For purposes of the agreement, "Good Reason" is defined as: (i) any material breach of the agreement by us; (ii) any material diminution by us of the executive's duties, responsibilities, or authority; (iii) a material reduction in the executive's annual base salary unless all officers and/or members of our executive management team experience an equal or greater percentage reduction in annual base salary and/or total compensation; (iv) in the case of Mr. Cook and Mr. Armstrong, a required relocation of the primary place of performance of the executive's duties to a location more than 50 miles from our then location in Bedminster, New Jersey, provided that a change in the location of the primary place of performance of the executive's duties will not constitute Good Reason if such change occurs prior to a change in control and we only require the executive to physically work at that new location two days or less per workweek and provide reimbursement of the executive's reasonable travel expenses in commuting to such new location; or (v) a material reduction in the executive's target bonus level unless all officers and/or members of our executive management team experience an equal or greater percentage reduction related to target bonus levels.

If the executive terminates his or her employment by written notice of termination or if the executive or we terminate his or her employment by providing a notice of nonrenewal at least 90 days before the agreement is set to expire, the executive will not be entitled to receive any payments or benefits other than any accrued compensation, any unpaid prior year's bonus, rights to indemnification and directors' and officers' liability insurance and as otherwise required by law.

If the executive's employment is terminated as a result of his or her death or disability, we will pay him or her or his or her estate, as applicable, any accrued compensation and any unpaid prior year's bonus.

Our agreements with Mr. Baluch, Mr. Cook, Mr. Armstrong and Ms. Masson each contain a non-compete provision that provides that during the term of each agreement and the 12-month period immediately following the executive's separation from employment for any reason, the executive is prohibited from engaging in any business involving the development or commercialization of a preventive anti-infective product that would be a direct competitor of Neutrolin or a product containing taurolidine or any other product being actively developed or produced by us within the United States and the European Union on the date of termination of his or her employment.

Tax and Accounting Considerations

U.S. federal income tax generally limits the tax deductibility of compensation we pay to our Named Executive Officers to \$1.0 million in the year the compensation becomes taxable to the executive officers. There is an exception to the limit on deductibility for performance-based compensation that meets certain requirements. Although deductibility of compensation is preferred, tax deductibility is not a primary objective of our compensation programs. Rather, we seek to maintain flexibility in how we compensate our executive officers so as to meet a broader set of corporate and strategic goals and the needs of stockholders, and as such, we may be limited in our ability to deduct amounts of compensation from time to time. Accounting rules require us to expense the cost of our stock option grants. Because of option expensing and the impact of dilution on our stockholders, we pay close attention to, among other factors, the type of equity awards we grant and the number and value of the shares underlying such awards.

Pension Benefits

We do not maintain any qualified or non-qualified defined benefit plans. As a result, none of our Named Executive Officers participate in or have account balances in qualified or non-qualified benefit plans sponsored by us. Our Compensation Committee may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

Nonqualified Deferred Compensation

None of our Named Executive Officers participate in our have account balances in nonqualified defined contribution plans or other non-qualified deferred compensation plans maintained by us. Our Compensation Committee may elect to provide our officers and other employees with non-qualified defined contribution or other non-qualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

Summary Compensation Table

The following table sets forth information with respect to compensation earned by our Named Executive Officers in the years ended December 31, 2018 and 2017:

Name and Principal Position	Year	Salary (\$)	Option Awards (1) (\$)	Restricted Stock Units Awards (1) (\$)	Non-equity Incentive Plan Compensation (\$)	All Other Compensation (\$)	Total (\$)
Khoso Baluch (2)	2018	375,000			189,000(6)	22,841 (7)	586,841
Chief Executive Officer	2017	375,000			(6)	68,533 ₍₈₎	443,533
Robert W. Cook (3)	2018	350,000			60,638(6)	23,546(7)	434,184
Chief Financial Officer	2017	320,385	455,945		(6)	24,273(7)	800,603
John Armstrong (4)	2018	312,308			56,963 ₍₆₎		369,271
Executive Vice President for	2017	341,056(4)	167,020	78,604(4)			586,680
Technical Operations							
Elizabeth Masson (5)	2018	277,345(5)	65,410		(6)	21,723(7)	364,478
Executive Vice President and Head of Clinical Operations	2017	2,800 (5)					2,800

- (1) The amounts included in this column are the dollar amounts representing the full grant date fair value of each award calculated in accordance with FASB ASC Topic 718 and do not represent the actual value that may be recognized by the Named Executive Officers upon option exercise.
- (2) Mr. Baluch became our Chief Executive Officer on October 3, 2016.
- (3) Mr. Cook became our Chief Financial Officer on February 1, 2017.
- (4) Mr. Armstrong became our Executive Vice President for Technical Operations on March 1, 2017. His salary for 2017 includes fees as a consultant.
- (5) Ms. Masson became our Executive Vice President and Head of Clinical Operations on March 19, 2018. Her salary for 2018 included fees as a consultant and her 2017 salary consists of consulting fees.
- (6) Non-equity incentive bonuses paid in 2018 were for performance criteria set for the year 2017. For the performance criteria set for the year 2018, we will report in a Form 8-K non-equity incentive bonuses, if any, that are achieved.
- (7) Consists of 401K employer match, health and insurance benefits.
- (8) Consists of health benefits, 401K employer match and reimbursed moving expenses.

Outstanding Equity Awards at Fiscal Year-End 2018

The following table contains certain information concerning unexercised options for the Named Executive Officers as of December 31, 2018.

Name	Number of Shares Underlying Unexercised Options (#) – Exercisable	Number of Shares Underlying Unexercised Options (#) – Unexercisable	Option Exercise Price (\$)	Option Expiration Date
Khoso Baluch	725,000	825,000	2.52	10/03/2026
Robert W. Cook	178,250	171,750	1.69	1/30/2027
John Armstrong	10,000		1.52	11/14/2024
	15,000		3.25	7/28/2025
	195,632	4,368	2.51	3/08/2026
	33,000	67,000	2.18	3/01/2027
Elizabeth Masson	0	186,000	0.29	3/19/2028

Option Repricings

We did not engage in any repricings or other modifications to any of our Named Executive Officers' outstanding options during the year ended December 31, 2018.

Potential Payments on Change of Control

If the severance payments called for in our agreements for Mr. Baluch, Mr. Cook, Mr. Armstrong and Ms. Masson had been triggered on December 31, 2018, we would have been obligated to make the following payments:

	Cash Payment (\$ per month) and			Benefits (\$ per month)		Number of Options (# that would vest) and		
Name		(# of months p	aid)	 (# of months p	aid)	(\$ marke	t value)	(1)
Khoso Baluch	\$	31,250	12 mos.	\$ 1,858	12 mos.	825,000	\$	-0-
Robert W. Cook	\$	29,167	9 mos.	\$ 1,858	9 mos.	171,750	\$	-0-
John Armstrong	\$	25,833	9 mos.	\$ 1,858	9 mos.	71,368	\$	-0-
Elizabeth Masson	\$	23,333	9 mos.	\$ 2,317	9 mos.	186,000	\$	186,000

⁽¹⁾ The market value equals the difference the fair market value of the shares that could be acquired based on the closing sale price per share of our common stock on the NYSE American on December 31, 2018, which was \$1.29, and the exercise prices for the underlying stock options.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Principal Stockholders

The following table shows the number of shares of our common stock beneficially owned as of February 28, 2019 by:

- each person known by us to own beneficially more than 5% of the outstanding shares of our common stock;
- each director;
- each of our executive officers named in the Summary Compensation Table below (the "Named Executive Officers") and our current executive officers; and
- all of our current directors and executive officers as a group.

This table is based upon the information supplied by our Named Executive Officers, directors and principal stockholders and from Schedules 13D and 13G filed with the SEC. Except as indicated in footnotes to this table, the persons named in this table have sole voting and investment power with respect to all shares of common stock shown, and their address is c/o CorMedix Inc., 400 Connell Drive, Suite 5000, Berkeley Heights, New Jersey 07922. As February 28, 2019, we had 118,404,171 shares of common stock outstanding. Beneficial ownership in each case also includes shares issuable upon exercise of outstanding options that can be exercised within 60 days after February 28, 2019 for purposes of computing the percentage of common stock owned by the person named. Options owned by a person are not included for purposes of computing the percentage owned by any other person.

Common Stock

Name and Address of Beneficial Owner	Beneficially Own	
	Shares	%
5% or Greater Stockholders		
Elliott Associates, L.P. (2)	12,137,477	9.9%
Directors and Named Executive Officers:		
Khoso Baluch (3)	1,010,373	*
Robert Cook (4)	360,333	*
John Armstrong (5)	565,708	*
Elizabeth Masson (6)	181,000	*
Janet M. Dillione (7)	369,533	*
Myron Kaplan (8)	585,540	*
Mehmood Khan (9)	677,208	*
Steven Lefkowitz (10)	515,885	*
All executive officers and directors as a group (8 persons) (11)	4,265,580	3.5%

- * Less than 1%
- (1) Based upon 118,404,171 shares of our common stock outstanding on February 28, 2019 and, with respect to each individual holder, rights to acquire our common stock exercisable within 60 days of February 28, 2019.
- Due to the Ownership Limitation (as defined below), Elliott Associates, L.P. ("Elliott Associates") may be deemed the beneficial owner of 12.137.477 shares of our common stock through securities held by it and by Manchester Securities Corp., a wholly-owned subsidiary of Elliott Associates ("Manchester"), and Elliott International, L.P. ("Elliott International"), the investment advisor of which is an affiliate of the investment advisor of Elliott Associates. Elliott Associates beneficially holds: (i) 2,833,470 shares of our common stock held by Elliott International, (ii) 1,333,398 shares of our common stock held by Elliott Associates, (iii) May 2013 warrants held by Manchester exercisable for 500,000 shares of our common stock, (iv) 52,500 shares of our Series C-2 non-voting convertible preferred stock held by Elliott Associates convertible into 525,000 shares of our common stock, (v) October 2013 warrants held by Elliott Associates exercisable for 262,500 shares of our common stock, (vi) 97,500 shares of our Series C-2 non-voting convertible preferred stock held by Elliott International convertible into 975,000 shares of our common stock, (vii) October 2013 warrants held by Elliott International exercisable for 487,500 shares of our common stock, (viii) 73,962 shares of our Series D non-voting convertible preferred stock held by Manchester convertible into 1,479,240 shares of our common stock, (ix) March 2015 Warrants held by Manchester convertible into 200,000 shares of our common stock, (x) May 2017 Series B warrants held by Elliott International convertible into 1,360,001 shares of our common stock, (xi) May 2017 Series B warrants held by Elliott Associates convertible into 640,000 shares of our common stock, (xii) 89,623 shares of our Series E non-voting convertible preferred stock held by Manchester convertible into 1,959,759 shares of our common stock, (xiii) 1,360 shares of our Series F non-voting convertible preferred stock held by Elliott International convertible into 8,395,062 shares of our common stock, (xiv) 640 shares of our Series F non-voting convertible preferred stock held by Elliott Associates convertible into 3,950,617 shares of our common stock, (xv) November 2017 warrants exercisable for 384,103 shares of our common stock held by Elliott International, (xvi) November 2017 warrants exercisable for 180,755 shares of our common stock held by Elliott Associates, (xvii) December 2018 warrants exercisable for 450,000 shares of our common stock held by Manchester, and (xviii) a convertible note held by Manchester convertible into 5,000,000 shares of our common stock (the May 2013 warrants, the October 2013 warrants, the March 2015 Warrants, the May 2017 Series B warrants, the November 2017 warrants, the December 2018 warrants and convertible note and all shares of preferred stock shall collectively be referred to herein as the "Convertible Securities"). However, in accordance with Rule 13d-4 under the Exchange Act, the number of shares of our common stock into which the Convertible Securities are convertible or exercisable, as applicable, are limited pursuant to the terms of the Convertible Securities to that number of shares of our common stock which would result in Elliott Associates having aggregate beneficial ownership of, with respect to the May 2013 warrants, the October 2013 warrants, the March 2015 Warrants, the May 2017 Series B warrants, the November 2017 warrants, the December 2018 warrants, the Series C-2 preferred stock, the Series D preferred stock, the Series E preferred stock, the Series F preferred stock and the December 2018 convertible note, 9.99% of the total issued and outstanding shares of our common stock (the "Ownership Limitation"). Elliott Associates disclaims beneficial ownership of any and all shares of our common stock issuable upon any conversion or exercise of the Convertible Securities if such conversion or exercise would cause Elliott Associates' aggregate beneficial ownership to exceed or remain above the applicable Ownership Limitation (as is currently the case). Therefore, Elliott Associates disclaims beneficial ownership of any shares of our common stock, issuable upon any conversion or exercise of the May 2013 warrants, the October 2013 warrants, the March 2015 Warrants, the May 2017 Series B warrants, the November 2017 warrants, the December 2018 warrants, the Series C-2 preferred stock, the Series D preferred stock, the Series E preferred stock, the Series F preferred stock and the December 2018 convertible note, which conversion or exercise would be prohibited by the Ownership Limitation. The business address of Elliott Associates is 40 West 57th Street, 30th Floor, New York, New York 10019. Based solely on information contained in a Schedule 13D filed with the SEC on November 13, 2017 by Elliott Associates and other information known to us.
- (3) Consists of (i) 250,373 shares of our common stock, and (ii) 760,000 shares of our common stock issuable upon exercise of stock options.
- (4) Consists of (i) 127,083 shares of our common stock, and (ii) 233,250 shares of our common stock issuable upon exercise of stock options.
- (5) Consists of (i) 306,890 shares of our common stock, and (ii) 258,818 shares of our common stock issuable upon exercise of stock options.
- (6) Consists of (i) 40,000 shares of our common stock, and (ii) 141,000 shares of our common stock issuable upon exercise of stock options.
- (7) Consists of (i) 122,867 shares of our common stock, (ii) 243,750 shares of our common stock issuable upon exercise of stock options, and (iii) 2,916 shares of our common stock upon issuance of restricted stock units.

- (8) Consists of 428,040 shares of our common stock, (ii) 148,750 shares of our common stock issuable upon exercise of stock options. and (iii) 8,750 shares of our common stock upon issuance of restricted stock units.
- (9) Consists of 565,874 shares of our common stock, and (ii) 108,750 shares of our common stock issuable upon exercise of stock options, and (iii) 2,584 shares of our common stock upon issuance of restricted stock units.
- (10) Consists of 362,969 shares of our common stock, (ii) 108,750 shares of our common stock issuable upon exercise of stock options, (iii) 22,500 shares of our common stock issuable upon exercise of warrants, and (iv) 15,000 shares of our common stock issuable upon exercise of warrants through Wade Capital Corporation Money Purchase Plan, an entity for which Mr. Lefkowitz has voting and investment control, and (v) 6,666 shares of our common stock upon issuance of restricted stock units.
- (11) Consists of (i) the following held by our directors and executive officers (A) 2,204,096 shares of our common stock, (B) 2,003,068 shares of our common stock issuable upon exercise of stock options, (C) 37,500 shares of our common stock upon exercise of warrants, and (D) 20,916 shares of our common stock upon issuance of restricted stock units, as referenced in footnotes 3 through 10.

Item 13. Certain Relationships and Related Transactions and Director Independence

Related Party Transactions

On November 29, 2017, we hired Dr. Gary Gelbfish, at that time one of our directors, as a consultant to assist in our planned interim analysis for our LOCK-IT 100 clinical trial for Neutrolin. Pursuant to the consulting agreement between us and Dr. Gelbfish, in September 2018, we paid \$210,000 in fees submitted by Dr. Gelbfish under the consulting agreement for his work in the data quality review for the interim analysis of our LOCK-IT-100 clinical trial for Neutrolin. Under the terms of the consulting agreement, Dr. Gelbfish was compensated at the rate of \$800 per hour. The consulting agreement expired on September 30, 2018. In January 2019, Dr. Gelbfish resigned as a director.

Procedures for Review and Approval of Transactions with Related Persons

Pursuant to the Audit Committee Charter, the Audit Committee is responsible for reviewing and approving all related party transactions as defined under Item 404 of Regulation S-K, after reviewing each such transaction for potential conflicts of interests and other improprieties. Our policies and procedures for review and approval of transactions with related persons are in writing in our Code of Conduct and Ethics available on our website at www.cormedix.com under the "Investor Relations—Corporate Governance" tab.

The information on Board independence is found in Item 10 of this Report under the heading "Board Independence."

Item 14. Principal Accounting Fees and Services

Fees Paid to the Independent Registered Public Accounting Firm

The following table sets forth fees billed to us by Friedman LLP, our independent registered public accounting firm for the years ended December 31, 2018 and 2017, for services relating to: auditing our annual financial statements; reviewing our financial statements included in our quarterly reports on Form 10-Q; reviewing registration statements during 2018 and 2017; financing activities in 2018 and 2017; and services rendered in connection with tax compliance, tax advice and tax planning, and all other fees for services rendered.

	 2018	 2017
Audit Fees	\$ 195,500	\$ 188,100
Audit Related Fees	-	5,000
Tax Fees	-	11,300
All Other Fees	 <u> </u>	 <u></u>
Total	\$ 195,500	\$ 204,400

Audit Committee Pre-Approval Policies and Procedures

Pursuant to its charter, the Audit Committee is responsible for reviewing and approving in advance any audit and any permissible non-audit engagement or relationship between us and our independent registered public accounting firm. The Audit Committee may delegate to one or more designated members of the Audit Committee the authority to grant pre-approvals, provided such approvals are presented to the Audit Committee at a subsequent meeting. If the Audit Committee elects to establish pre-approval policies and procedures regarding non-audit services, the Audit Committee must be informed of each non-audit service provided by our independent registered public accounting firm. Audit Committee pre-approval of audit and non-audit services will not be required if the engagement for the services is entered into pursuant to pre-approval policies and procedures, provided the policies and procedures are detailed as to the particular service, the Audit Committee is informed of each service provided and such policies and procedures do not include delegation of the Audit Committee's responsibilities under the Exchange Act to our management. Audit Committee pre-approval of non-audit services (other than review and attestation services) also will not be required if such services fall within available exceptions established by the SEC. All services performed by our independent registered public accounting firm during 2018 were pre-approved by the Audit Committee.

PART IV

Item 15. **Exhibits, Financial Statement Schedules**

(a) List of documents filed as part of this report:

1. Financial Statements:

The financial statements of the Company and the related reports of the Company's independent registered public accounting firms thereon have been filed under Item 8 hereof.

2. Financial Statement Schedules:

None.

3. Exhibit Index

The following is a list of exhibits filed as part of this Form 10-K:

Exhibit		Registrant's		Exhibit	
Number	Description of Document	Form	Dated	Number	Filed Herewith
<u>1.1</u>	At-the-Market Issuance Sales Agreement, dated March 9, 2018,				
	between CorMedix Inc. and B. Riley FBR, Inc	S-3	3/09/2018	1.1	
<u>3.1</u>	Form of Amended and Restated Certificate of Incorporation.	S-1/A	3/01/2010	3.3	
<u>3.2</u>	Certificate of Amendment to Amended and Restated Certificate of Incorporation, dated February 24, 2010.	S-1/A	3/19/2010	3.5	
3.3	Form of Amended and Restated Bylaws as amended April 19, 2016.	10-Q	5/10/2016	3.1	
<u>3.4</u>	Certificate of Amendment to Amended and Restated Certificate of				
	Incorporation, dated December 3, 2012.	10-K	3/27/2013	3.3	
3.5	Certificate of Amendment to Amended and Restated Certificate of Incorporation, dated August 9, 2017.	8-K	8/10/2017	3.1	
<u>3.6</u>	Certificate of Designation of Series A Non-Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on	0.14	0/10/0010	0.0	
0.7	February 18, 2013, as corrected on February 19, 2013.	8-K	2/19/2013	3.3	
<u>3.7</u>	Certificate of Designation of Series B Non-Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on July 26, 2013.	8-K	7/26/2013	3.4	
<u>3.8</u>	Certificate of Designation of Series C-1 Non-Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on October 21, 2013.	8-K	10/23/2013	3.5	
<u>3.9</u>	Amended and Restated Certificate of Designation of Series C-2 Non- Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.15	
<u>3.10</u>	Amended and Restated Certificate of Designation of Series C-3 Non- Voting Convertible Preferred Stock of CorMedix Inc., filed with the	0.14		0.40	
	Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.16	
<u>3.11</u>	Amended and Restated Certificate of Designation of Series D Non- Voting Convertible Preferred Stock of CorMedix Inc., filed with the	0.17		0.47	
	Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.17	
	60				

Exhibit		Registrant's		Exhibit	
Number	Description of Document	Form	Dated	Number	Filed Herewith
<u>3.12</u>	Amended and Restated Certificate of Designation of Series E Non-				
	Voting Convertible Preferred Stock of CorMedix Inc., filed with the	0.17	0//0/00//	0.40	
0.10	Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.18	
<u>3.13</u>	Amended and Restated Certificate of Designation of Series F Non- Voting Convertible Preferred Stock of CorMedix Inc., filed with the				
	Delaware Secretary of State on December 11, 2017.	8-K	12/11/2017	3.1	
<u>4.1</u>	Specimen of Common Stock Certificate.	S-1/A	3/19/2010	4.1	
4.2	Form of Warrant issued on February 19, 2013.	8-K	2/19/2013	4.13	
<u>4.3</u>	Form of Second Amended Restated Warrant originally issued on		2/10/2010		
	October 22, 2013.	8-K	1/3/2019	4.2	
4.4	Form of Warrant issued on January 8, 2014.	8-K	1/09/2014	4.23	
<u>4.5</u>	Form of Warrant issued on March 10, 2014.	8-K	03/05/2014	4.24	
<u>4.6</u>	Warrant issued March 3, 2015.	8-K	03/04/2015	4.1	
<u>4.7</u>	Amended and Restated Warrant originally issued March 24, 2010.	8-K	03/04/2015	4.3	
4.8	Third Amended and Restated Warrant originally issued May 30, 2013.	8-K	01/03/2019	4.3	
<u>4.9</u>	Registration Rights Agreement, dated March 3, 2015, by and between				
	CorMedix Inc. and Manchester Securities Corp.	8-K	03/04/2015	4.5	
<u>4.10</u>	Form of Series B Warrant to Purchase Common Stock of CorMedix Inc.	0.14		4.0	
4.44	issued on May 3, 2017.	8-K	05/03/2017	4.2	
<u>4.11</u>	Form of Underwriter's Warrant to Purchase Common Stock of CorMedix Inc., issued May 3, 2017.	8-K	05/03/2017	4.3	
4.12	Form of Warrant issued on November 16, 2017.	8-K	11/13/2017	4.15	
4.13	Form of Warrant issued on December 31, 2018	8-K	1/03/2017	4.1	
4.14	Senior Secured Convertible Note issued December 31, 2018.	8-K	1/03/2019	4.4	
10.1*	License and Assignment Agreement, dated as of January 30, 2008,				
	between the Company and ND Partners LLC.	S-1/A	12/31/2009	10.5	
10.2	Escrow Agreement, dated as of January 30, 2008, among the				
	Company, ND Partners LLC and the Secretary of the Company, as	0.4		40.0	
	Escrow Agent.	S-1	11/25/2009	10.6	
	61				

Number Description of Document Form Dated Number Filed Herewith	Exhibit		Registrant's		Exhibit	
Company and Frank Prosl. S-1 11/25/2009 10.12	Number	Description of Document	Form	Dated	Number	Filed Herewith
10.4	<u>10.3</u>	Consulting Agreement, dated as of January 30, 2008, between the				
10.5 Form of Indemnification Agreement between the Company and each of its directors and executive officers. S-1/A 3/01/2010 10.17 10.6 2013 Stock Incentive Plan 10-K 3/27/2013 10.27 10.7 Preliminary Services Agreement dated April 8, 2015, between CorMedix Inc. and [RC]2 Pharma Connect LLC. 10-Q 8/06/2015 10.1 10.8 Release of Claims and Severance Modification, dated July 17, 2015, between Randy Milby and CorMedix Inc. 10-K 3/15/2016 10.16 10.9		Company and Frank Prosl.	S-1	11/25/2009	10.12	
its directors and executive officers. S-1/A 3/01/2010 10.17 10.6 2013 Stock Incentive Plan 10-K 3/27/2013 10.27 10.7 Preliminary Services Agreement dated April 8, 2015, between CorMedix Inc. and [RC]2 Pharma Connect LLC. 10-Q 8/06/2015 10.1 10.8 Release of Claims and Severance Modification, dated July 17, 2015, between Randy Milby and CorMedix Inc. 10-K 3/15/2016 10.16 10.9* Employment Agreement, dated as of September 27, 2016 and effective as of October 3, 2016, between CorMedix, Inc. and Khoso Baluch 8-K 10/03/2016 10.1 10.10* Employment Agreement, effective February 1, 2017, between CorMedix Inc. and Robert Cook. 10-K 3/16/2017 10.12 10.11 Employment Agreement, effective March 1, 2017, between CorMedix Inc. and John Armstrong. 10-K 3/16/2017 10.14 10.12 Form of Securities Purchase Agreement, dated November 17, 2017, between CorMedix Inc. and the investor and the investor signatory thereto. 8-K 11/13/2017 10.1 10.13 Backstop Agreement, dated November 9, 2017, between CorMedix Inc. and the investor named therein. 8-K 11/13/2017 10.2 10.14 Form of Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 8-K 11/13/2017 10.3 10.15 Amendment No. 1, dated as of December 11, 2017, to Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 8-K 12/11/2017 10.1 10.16* Employment Agreement, effective March 19, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1	<u>10.4</u>	Amended and Restated 2006 Stock Incentive Plan.	S-1/A	3/01/2010	10.8	
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10.7		its directors and executive officers.	S-1/A	3/01/2010	10.17	
Inc. and [RC]2 Pharma Connect LLC.	<u>10.6</u>	2013 Stock Incentive Plan	10-K	3/27/2013	10.27	
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Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 8-K 12/11/2017 10.1 10.16* Employment Agreement, effective March 19, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between	10.15		0-17	11/13/2017	10.3	
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	10 17		10 0	5/15/2010	10.1	
700/E010	10.17		8-K	1/03/2019	10.1	
		Common mo. and the investor married therein.	5	1,00,2010		

Exhibit		Registrant's		Exhibit	
Number	Description of Document	Form	Dated	Number	Filed Herewith
<u>21.1</u>	List of Subsidiaries	10-K	3/27/2013	21.1	
<u>23.1</u>	Consent of Independent Registered Public Accounting Firm.				Χ
<u>31.1</u>	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				Х
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				Х
<u>32.1</u>	Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				Х
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				X
101	The following materials from CorMedix Inc. Form 10-K for the year ended December 31, 2018, formatted in Extensible Business Reporting Language (XBRL): (i) Balance Sheets at December 31, 2018 and 2017, (ii) Statements of Operations for the years ended December 31, 2018 and 2017, (iii) Statements of Changes in Stockholders' Equity for the years ended December 31, 2018 and 2017, (iv) Statements of Cash Flows for the years ended December 31, 2018 and 2017 and (v) Notes to the Financial Statements.**				X
	to the Financial Statements.				^

^{*} Confidential treatment has been granted for portions of this document. The omitted portions of this document have been filed separately with the SEC.

Item 16. Form 10-K Summary

Not applicable.

^{**} Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files in 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 Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

CORMEDIX INC.

March 14, 2019 By: /s/ Khoso Baluch

Khoso Baluch Chief Executive Officer (Principal Executive Officer)

March 14, 2019 By: /s/ Robert Cook

Robert Cook

Chief Financial Officer

(Principal Financial and Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Khoso Baluch Khoso Baluch	Chief Executive Officer and Director (Principal Executive Officer)	March 14, 2019
/s/ Robert Cook Robert Cook	Chief Financial Officer (Principal Financial and Accounting Officer)	March 14, 2019
/s/ Myron Kaplan Myron Kaplan	Chairman of the Board and Director	March 14, 2019
/s/ Janet Dillione Janet Dillione	Director	March 14, 2019
/s/ Alan Dunton	Director	March 14, 2019
Alan Dunton /s/ Mehmood Khan	Director	March 14, 2019
Mehmood Khan /s/ Steven Lefkowitz	Director	March 14, 2019
Steven Lefkowitz		
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CORMEDIX INC. AND SUBSIDIARY

FINANCIAL STATEMENTS

Financial Statements Index

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Consolidated Balance Sheets as of December 31, 2018 and 2017	F-3
Consolidated Statements of Operations and Comprehensive Income (Loss) Years Ended December 31, 2018 and 2017	F-4
Consolidated Statements of Changes in Stockholders' Equity Years Ended December 31, 2018 and 2017	F-5
Consolidated Statements of Cash Flows Years Ended December 31, 2018 and 2017	F-6
Notes to Consolidated Financial Statements	F-7

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of CorMedix, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of CorMedix, Inc. and subsidiary (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Friedman LLP We have served as the Company's auditor since 2014.

East Hanover, New Jersey March 14, 2019

CORMEDIX INC. AND SUBSIDIARY CONSOLIDATED BALANCE SHEETS

December 31, 2018 and 2017

ACCETO		2018		
ACCETC		2010		2017
ASSETS		_		
Current assets				
Cash and cash equivalents	\$	17,623,770	\$	10,379,729
Restricted cash		171,553		171,553
Short-term investments		-		1,604,198
Trade receivables, net		10,904		64,148
Inventories, net		428,515		594,194
Prepaid research and development expenses		8,113		86,652
Other prepaid expenses and current assets		422,199		367,177
Total current assets	·	18,665,054		13,267,651
Property and equipment, net		160,860		186,282
TOTAL ASSETS	\$	18,825,914	\$	13,453,933
LIABILITIES AND STOCKHOLDERS' EQUITY				
Current liabilities				
Accounts payable	\$	2,588,977	\$	1,808,311
Accrued expenses		5,166,224		4,363,867
Deferred revenue		11,029		88,404
Total current liabilities		7,766,230		6,260,582
Convertible note, related party, net		6,125,428		-
TOTAL LIABILITIES		13,891,658		6,260,582
COMMITMENTS AND CONTINGENCIES (Note 7)				
STOCKHOLDERS' EQUITY				
Preferred stock - \$0.001 par value: 2,000,000 shares authorized; 419,585 shares issued and outstanding at				
December 31, 2018 and 2017		420		420
Common stock - \$0.001 par value: 160.000,000 shares authorized at December 31, 2018; 108.875,866 and		720		720
71,413,790 shares issued and outstanding at December 31, 2018 and 2017, respectively		108,876		71,414
Accumulated other comprehensive gain		96,522		98,433
Additional paid-in capital		183,716,536		159,197,950
Accumulated deficit		(178,988,098)		152,174,866
TOTAL STOCKHOLDERS' EQUITY		4,934,256		7,193,351
		, , , , , , ,	_	13,453,933

The accompanying notes are integral part of these consolidated financial statements.

CORMEDIX INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

Years Ended December 31, 2018 and 2017

		December 31,		
		2018		2017
Revenue				
Net sales	\$	429,797	\$	329,327
Cost of sales		(396,786)		(114,964)
Gross profit		33,011		214,363
Operating Expenses				
Research and development	(18,822,488)		(24,486,122)
Selling, general and administrative		(8,074,719)		(8,652,351)
Total operating expenses	(26,897,207)		(33,138,473)
Loss From Operations	(26,864,196)		(32,924,110)
Other Income (Expense)				
Interest income		36,618		110,714
Foreign exchange transaction loss		(179)		(13,758)
Change in fair value of derivative liabilities		-		(177,141)
Interest expense		(1,873)		(5,619)
Total income (expense)		34,566		(85,804)
Net Loss	(26,829,630)		(33,009,914)
Other Comprehensive Income (Loss)				·
Unrealized gain from investments		-		13,103
Foreign currency translation (loss) gain		(1,911)		4,144
Total other comprehensive (loss) income		(1,911)		17,247
Comprehensive Loss	\$ (26,831,541)	\$	(32,992,667)
Net Loss Per Common Share – Basic and Diluted	\$	(0.30)	\$	(0.60)
Weighted Average Common Shares Outstanding – Basic and Diluted		89,083,119		55,141,133

The accompanying notes are integral part of these consolidated financial statements.

CORMEDIX INC. AND SUBSIDIARY CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY Years Ended December 31, 2018 and 2017

	Commo	n Stock	Series C-2, C-3,	eferred Stock – Series D, Series Series F	Accumulated Other Comprehensive Gain (Loss)	Additional Paid-in Capital	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2016	40,432,339	\$ 40,433	450,085	\$ 450	\$ 81,186	\$ 136,857,409	\$ (119,164,952)	\$ 17,814,526
Stock issued in connection with ATM								
sale of common stock, net	8,925,504	8,925	-	-	-	5,534,131	-	5,543,056
Stock issued in connection with public								
offering, net	18,619,301	18,619	-	-	-	12,779,706	-	12,798,325
Stock issued in connection with sale of								
common stock	624,246	624				299,016		299,640
Conversion of Series C-3 non-voting								
preferred stock to common stock	325,000	325	(32,500)	(32)	-	(293)	-	-
Stock issued in connection with								
warrants cashless exercised	970	1	-	-	-	(1)	-	-
Stock issued in connection with stock								
options exercised	10,000	10	-	-	-	6,790	-	6,800
Issuance of Series F non-voting			0.000			4 077 474		4 077 470
preferred stock, net	-	-	2,000	2	-	1,877,174	-	1,877,176
Stock issued for payment of deferred	4.869	5				40.040		10.010
fees	4,869	5	-	-	-	10,213	-	10,218
Conversion of Series A warrants to common stock	2,471,561	2.472				(2,472)		
Reclassification of derivative liability to	2,471,361	2,4/2	-	-	-	(2,472)	-	-
equity						3,910,682		3,910,682
Warrants issued in connection with		_	_	_		3,310,002		3,910,002
public offering	_	_	_	_	_	(3,733,542)	_	(3,733,542)
Stock-based compensation	_	_	_	_	_	1,659,137	_	1,659,137
Other comprehensive gain	_	_	_	_	17,247	-	_	17,247
Net loss	_	_	_	_		_	(33,009,914)	(33,009,914)
Balance at December 31, 2017	71,413,790	71,414	419,585	420	98,433	159,197,950	(152,174,866)	7,193,351
Stock issued in connection with ATM	7 1, 110,700	, ,, , , ,	7.0,000	.20	00,100	100,107,000	(102,171,000)	7,100,001
sale of common stock, net	35,888,772	35,889	_	_	_	21,932,118	_	21,968,007
Value of warrants related to convertible	00,000,11					_ ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,,,,,,,
note	_	_	-	_	=	1,122,355	=	1,122,355
Beneficial conversion feature related to						, ,		, ,
convertible note	-	-	-	-	-	143,431	-	143,431
Stock issued in connection with								
warrants exercised	25,000	25	-	-	-	26,225	-	26,250
Stock issued in connection with								
warrants cashless exercised	1,248,850	1,248	-	-	-	(1,248)	-	-
Stock issued in connection with stock								
options exercised	40,000	40	-	-	-	11,560	-	11,600
Issuance of restricted stock units	131,826	132	-	-	-	(132)	-	-
Stock issued for payment of deferred								
board compensation	127,628	128	-	-	-	173,645	-	173,773
Stock-based compensation	-	-	-	-	-	1,110,632	-	1,110,632
Cumulative effect of adoption of ASC								
606 (Note 3)	-	-	-	-	-	-	16,398	16,398
Other comprehensive loss	-	-	-	-	(1,911)	-	-	(1,911)
Net loss		-		-	-	-	(26,829,630)	(26,829,630)
Balance at December 31, 2018	108,875,866	\$ 108,876	419,585	\$ 420	\$ 96,522	\$ 183,716,536	\$ (178,988,098)	\$ 4,934,256

The accompanying notes are integral part of these consolidated financial statements.

CORMEDIX INC. AND SUBSIDIARY

CONSOLIDATED STATEMENTS OF CASH FLOWS

Years Ended December 31, 2018 and 2017

	Decemb	oer 31,
	2018	2017
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	\$ (26,829,630)	\$ (33,009,914
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation	1,110,632	1,659,13
Inventory reserve	-	(327,00
Change in fair value of derivative liabilities		177,14
Depreciation	74,218	36,88
Changes in operating assets and liabilities:		
Decrease (increase) in trade receivables	51,986	(47,59
Decrease (increase) in inventory	165,679	(100,46
Decrease in prepaid expenses and other current assets	23,165	869,43
Increase in accounts payable	782,062	157,52
Increase in accrued expenses	997,724	2,022,98
Decrease in deferred revenue	(76,401)	(25,31
Net cash used in operating activities	(23,700,565)	(28,587,18
ASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of short-term investments	-	(13,074,16
Sale of short-term investments	1,604,307	23,583,99
Purchase of equipment	(48,893)	(151,98
Net cash provided by investing activities	1,555,414	10,357,83
ASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from sale of common stock from at-the-market program, net	21,968,007	5,543,05
Proceeds from senior convertible note	7,500,000	
Payment of debt issuance costs in connection with senior convertible note	(108,787)	
Proceeds from the public offering of common stock and warrants, net	-	12,798,32
Proceeds from sale of Series F non-voting preferred stock, net	-	1,877,17
Proceeds from sale of common stock	-	299,64
Proceeds from exercise of warrants	26,250	
Proceeds from exercise of stock options	11,600	6,80
Net cash provided by financing activities	29,397,070	20,524,99
Foreign exchange effects on cash	(7,878)	19,58
ET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	7,244,041	2,315,23
ASH AND CASH EQUIVALENTS AND RESTRICTED CASH – BEGINNING OF YEAR	10,551,282	8,236,04
ASH AND CASH EQUIVALENTS AND RESTRICTED CASH – END OF YEAR	\$ 17,795,323	\$ 10,551,28
ash paid for interest	\$ 1,873	\$ 5,61
asii palu idi iliterest	Ψ 1,073	φ 3,01
upplemental Disclosure of Non Cash Financing Activities:		
Non-cash portion of debt discount on senior convertible notes	\$ 1,271,861	\$
Issuance of common stock for vested restricted stock units	\$ (132)	\$
Issuance of common stock for payment of deferred fees	\$ 173,773	\$ 10,21
Unrealized gain (loss) from investments	\$ -	\$ 13,10
Conversion of preferred stock to common stock	\$ -	\$ 32
Reclassification of derivative liabilities to equity	\$ -	\$ 3,910,68
	<u>*</u>	+ 1,0.0,00

The accompanying notes are integral part of these consolidated financial statements.

Note 1 — Organization, Business and Basis of Presentation:

Organization and Business:

CorMedix Inc. ("CorMedix" or the "Company") was incorporated in the State of Delaware on July 28, 2006. The Company is a biopharmaceutical company focused on developing and commercializing therapeutic products for the prevention and treatment of infectious and inflammatory diseases. In 2013, the Company formed a wholly-owned subsidiary, CorMedix Europe GmbH.

The Company's primary focus is to develop its lead product candidate, Neutrolin®, for potential commercialization in the United States ("U.S.") and other key markets. The Company has in-licensed the worldwide rights to develop and commercialize Neutrolin, which is a novel anti-infective solution (a formulation of taurolidine, citrate and heparin 1000 u/ml) under development for the reduction and prevention of catheter-related infections and thrombosis in patients requiring central venous catheters in clinical settings such as dialysis, critical/intensive care, and oncology.

The Company launched its first Phase 3 clinical trial in hemodialysis patients with catheters in the U.S. in December 2015. The clinical trial, named Catheter Lock Solution Investigational Trial or LOCK-IT-100, is a prospective, multicenter, randomized, double-blind, active control trial designed to demonstrate the efficacy and safety of Neutrolin in preventing catheter-related bloodstream infections, or CRBSI, in subjects receiving hemodialysis therapy as treatment for end stage renal disease. On July 25, 2018, the Company announced that the independent Data Safety Monitoring Board ("DSMB") had completed its review of the interim analysis of the data from the LOCK-IT-100 study and, because the pre-specified level of statistical significance was reached and efficacy had been demonstrated, the DSMB recommended the study be terminated early. No safety concerns were reported by the DSMB based on the interim analysis. The interim analysis showed that the 72% reduction of CRBSI by Neutrolin was well in excess of the study's assumed treatment effect size of a 55% reduction. The Company is currently in the process of closing the study.

Although two pivotal clinical trials to demonstrate safety and effectiveness of Neutrolin would generally be required by the U.S. Food and Drug Administration ("FDA") to secure marketing approval in the U.S., based on the recently completed and unblinded topline results of the LOCK-IT-100 study, the Company has begun discussions with the FDA on the appropriate next steps to support regulatory approval for Neutrolin. The Company agreed to provide the FDA a detailed analysis of the full data set including secondary endpoints from the LOCK-IT-100 study to facilitate FDA's consideration of its request to file the New Drug Application ("NDA") for Neutrolin on the basis of the LOCK-IT-100 study results. These data became available following the locking and unblinding of the study data in late January 2019. The analysis is planned to be completed over the next several weeks. The Company can provide no assurances that the FDA will not require a second clinical trial prior to NDA submission for Neutrolin.

The FDA also agreed that the Company could request consideration of Neutrolin for approval under the Limited Population Pathway for Antibacterial and Antifungal Drugs, or LPAD. LPAD, passed as part of the 21st Century Cures Act, is a new program intended to expedite the development of drug products which allows for the FDA's determination of safety and effectiveness to reflect the risk-benefit profile of the drug in the intended limited population, taking into account the severity, rarity, or prevalence of the infection and the availability of alternative treatments in the limited population.

The Company received CE Mark approval for Neutrolin in 2013 and commercially launched Neutrolin in Germany for the prevention of catheter-related bloodstream infections and maintenance of catheter patency in hemodialysis patients using a tunneled, cuffed central venous catheter for vascular access. Neutrolin is registered and is being sold in certain European Union and Middle Eastern countries.

In September 2014, the TUV-SUD and The Medicines Evaluation Board of the Netherlands granted labeling for expanded indications for Neutrolin in the European Union ("EU"). In December 2014, the Company received approval from the Hessian District President in Germany to expand the label to include use in oncology patients receiving chemotherapy through intravenous ("IV") administration, hydration and IV medications via central venous catheters. The expansion also adds patients receiving medication and IV fluids via central venous catheters in intensive or critical care units (cardiac care unit, surgical care unit, neonatal critical care unit, and urgent care centers). An indication for use in total parenteral, or IV, nutrition was also approved.

The Company is using its current cash resources for the close out of the LOCK-IT-100 clinical trial, and the preparation and submission of the NDA for Neutrolin. Commercial preparations and, if necessary, the execution of a second Phase 3 clinical trial are dependent on the Company's ability to raise sufficient additional funds through various potential sources, such as equity, debt financings, and/or strategic relationships. The Company can provide no assurances that financing or strategic relationships will be available on acceptable terms, or at all, to complete its clinical development program for Neutrolin.

Note 2 — Liquidity and Uncertainties:

The financial statements have been prepared in conformity with generally accepted accounting principles which contemplate continuation of the Company as a going concern. To date, the Company's commercial operations have not generated sufficient revenues to enable profitability. As of December 31, 2018, the Company had an accumulated deficit of \$179.0 million, and incurred losses from operations of \$26.8 million and \$33.0 million for the years ended December 31, 2018 and 2017, respectively. Based on the Company's current development plans for Neutrolin in both the U.S. and foreign markets and its other operating requirements, the Company's existing cash and cash equivalents at December 31, 2018 are expected to fund its operations into the second quarter of 2020, after taking into consideration the net proceeds received through March 8, 2019 from the At-the-Market Issuance Sales Agreement (the "ATM program"), see Note 8, and the exercise of warrants, see Note 10.

The Company's continued operations will depend on its ability to raise additional capital through various potential sources, such as equity and/or debt financings, strategic relationships, or out-licensing of its products in order to undertake a second Phase 3 clinical trial, if required by the FDA, commercially launch Neutrolin upon NDA approval and until profitability is achieved, if ever. Management can provide no assurances that such financing or strategic relationships will be available on acceptable terms, or at all. At the financial reporting date, the Company has approximately \$4.6 million available under its current ATM program and \$30.3 million available under its current shelf registration for the issuance of equity, debt or equity-linked securities unrelated to the current ATM program.

The Company's operations are subject to a number of other factors that can affect its operating results and financial condition. Such factors include, but are not limited to: the results of clinical testing and trial activities of the Company's product candidates; the ability to obtain regulatory approval to market the Company's products; ability to manufacture successfully; competition from products manufactured and sold or being developed by other companies; the price of, and demand for, Company products; the Company's ability to negotiate favorable licensing or other manufacturing and marketing agreements for its products; and the Company's ability to raise capital to support its operations.

Note 3 — Summary of Significant Accounting Policies:

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Basis of Consolidation

The consolidated financial statements include the accounts of the Company and CorMedix Europe GmbH, a wholly owned subsidiary. All significant intercompany accounts and transactions have been eliminated in consolidation.

Financial Instruments

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents and short-term investments. The Company maintains its cash and cash equivalents in bank deposit and other interest-bearing accounts, the balances of which, at times, may exceed federally insured limits.

The following table is the reconciliation of the recently adopted new accounting standard that modifies certain aspects of the recognition, measurement, presentation and disclosure of financial instruments as shown on the Company's condensed consolidated statement of cash flows:

	 December 31,			
	2018		2017	
Cash and cash equivalents	\$ 17,623,770	\$	10,379,729	
Restricted cash	171,553		171,553	
Total cash, cash equivalents and restricted cash	\$ 17,795,323	\$	10,551,282	

The appropriate classification of marketable securities is determined at the time of purchase and reevaluated as of each balance sheet date. Investments in marketable debt and equity securities classified as available-for-sale are reported at fair value. Fair value is determined using quoted market prices in active markets for identical assets or liabilities or quoted prices for similar assets or liabilities or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Changes in fair value that are considered temporary are reported net of tax in other comprehensive income (loss). Realized gains and losses, amortization of premiums and discounts and interest and dividends earned are included in income (expense). For declines in the fair value of equity securities that are considered other-than-temporary, impairment losses are charged to other (income) expense, net. The Company considers available evidence in evaluating potential impairments of its investments, including the duration and extent to which fair value is less than cost. There were no deemed permanent impairments at December 31, 2018 or 2017.

The Company's marketable securities are highly liquid and consist of U.S. government agency securities, high-grade corporate obligations and commercial paper with original maturities of more than 90 days. As of December 31, 2018 and 2017, all of the Company's investments had contractual maturities which were less than one year. The following table summarizes the amortized cost, unrealized gains and losses and the fair value at December 31, 2018 and 2017:

December 31, 2018:	Amortized Cost	Gross Unrealized Losses	Gross Unrealized Gains	Fair Value
Money Market Funds included in Cash Equivalents	\$ 1,179,673	\$ -	\$ -	\$ 1,179,673
Corporate Securities	-	-	-	-
Commercial Paper	<u> </u>	<u> </u>	<u>-</u>	<u>-</u> _
Subtotal	-	-	-	-
Total December 31, 2018	\$ 1,179,673	\$ -	\$ -	\$ 1,179,673
December 31, 2017:				
Money Market Funds included in Cash Equivalents	\$ 6,032,034	\$ -	\$ -	\$ 6,032,034
Corporate Securities	905,625	(112)	3	905,516
Commercial Paper	698,682		<u>-</u> _	698,682
Subtotal	1,604,307	(112)	3	1,604,198
Total December 31, 2017	\$ 7,636,341	\$ (112)	\$ 3	\$ 7,636,232

Fair Value Measurements

The Company's financial instruments recorded in the consolidated balance sheets include cash and cash equivalents, accounts receivable, investment securities, accounts payable and accrued expenses. The carrying value of certain financial instruments, primarily cash and cash equivalents, accounts receivable, accounts payable, and accrued expenses approximate their estimated fair values based upon the short-term nature of their maturity dates.

The Company's senior secured convertible note falls into the Level 3 category within the fair value level hierarchy. The fair value was determined using market data for valuation.

The Company categorizes its financial instruments into a three-level fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value, which is set out below. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the fair value measurement of the instrument.

- Level 1 inputs—Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 inputs— Significant other observable inputs (e.g., quoted prices for similar items in active markets, quoted prices for identical or similar items in
 markets that are not active, inputs other than quoted prices that are observable such as interest rate and yield curves, and market-corroborated inputs).
- Level 3 inputs—Unobservable inputs for the asset or liability, which are supported by little or no market activity and are valued based on management's estimates of assumptions that market participants would use in pricing the asset or liability.

The following table provides the carrying value and fair value of the Company's financial assets measured at fair value as of December 31, 2018 and 2017:

December 31, 2018:	Carrying Value	Level 1	Level 2	Level 3
Money Market Funds	\$ 1,179,673	\$ 1,179,673	\$ -	\$ -
Available for sale securities:				
Corporate Securities	-	-	-	-
Commercial Paper		<u>-</u>		
Subtotal	-	-	-	-
Total December 31, 2018	\$ 1,179,673	\$ 1,179,673	\$ -	\$ -
December 31, 2017:				
Money Market Funds	\$ 6,032,034	\$ 6,032,034	\$ -	\$ -
Available for sale securities:				
Corporate Securities	905,516	-	905,516	-
Commercial Paper	698,682	<u>-</u>	698,682	<u> </u>
Subtotal	1,604,198	-	1,604,198	-
Total December 31, 2017	\$ 7,636,232	\$ 6,032,034	\$ 1,604,198	\$ -

Foreign Currency Translation and Transactions

The consolidated financial statements are presented in U.S. Dollars (USD), the reporting currency of the Company. For the financial statements of the Company's foreign subsidiary, whose functional currency is the EURO, foreign currency asset and liability amounts, if any, are translated into USD at end-of-period exchange rates. Foreign currency income and expenses are translated at average exchange rates in effect during the year. Translation gains and losses are included in other comprehensive loss. The Company had foreign currency translation loss of \$1,911 in 2018 and a gain \$4,144 in 2017.

Foreign currency exchange transaction gain (loss) is the result of re-measuring transactions denominated in a currency other than the functional currency of the entity recording the transaction.

Segment and Geographic Information

The following table summarizes the segment and geographic information:

	 December 31,			
	 2018		2017	
Reported revenues	\$ 429,797	\$	329,327	
Revenues attributable to European and Mideast operations, which are based in Germany	\$ 420,973	\$	320,504	
Total assets	\$ 18,825,914	\$	13,453,933	
Total assets located in the United States, with the remainder in Germany	\$ 18,154,463	\$	12,597,231	

Restricted Cash

As of December 31, 2018 and 2017, the Company's restricted cash is in connection with the patent and utility model infringement proceedings against TauroPharm (see Note 7). The Company was required by the District Court Mannheim to provide a security deposit of approximately \$132,000 to cover legal fees in the event TauroPharm is entitled to reimbursement of these costs. The Company furthermore had to provide a deposit in the amount of \$40,000 in connection with the unfair competition proceedings in Cologne.

Prepaid Research and Development and Other Prepaid Expenses

Prepaid expenses consist of payments made in advance to vendors relating to service contracts for clinical trial development, manufacturing, pre-clinical development and insurance policies. These advanced payments are amortized to expense either as services are performed or over the relevant service period using the straight-line method.

Inventories, net

Inventories are valued at the lower of cost or net realizable value on a first in, first out basis. Inventories consist of raw materials (including labeling and packaging), work-in-process, and finished goods, if any, for the Neutrolin product. Inventories consist of the following:

	 December 31,				
	 2018		2017		
Raw materials	\$ 71,275	\$	141,233		
Work in process	86,957		526,067		
Finished goods	373,283		29,894		
Inventory reserve	(103,000)		(103,000)		
Total	\$ 428,515	\$	594,194		

Property and Equipment

Property and equipment consist primarily of furnishings, fixtures, leasehold improvements, office equipment and computer equipment all of which are recorded at cost. Depreciation is provided for by the straight-line method over the estimated useful lives of the related assets. Leasehold improvements are amortized using the straight-line method over the remaining lease term or the life of the asset, whichever is shorter. Property and equipment, as of December 31, 2018 and 2017 were \$160,860 and \$186,282, respectively, net of accumulated depreciation of \$218,948 and \$154,836, respectively. Depreciation and amortization of property and equipment is included in selling, general and administrative expenses.

Description	Estimated Useful Life
Office equipment and furniture	5 years
Leasehold improvements	5 years
Computer equipment	5 years
Computer software	3 years

Accrued Expenses

Accrued expenses consist of the following:

	December 31,			
		2018		2017
Professional and consulting fees	\$	258,352	\$	485,089
Accrued payroll and payroll taxes		1,102,143		755,221
Clinical trial related		3,408,032		2,531,608
Manufacturing development related		210,577		353,316
Product development		49,200		80,001
Market research		-		116,466
Other		137,920		42,166
Total	\$	5,166,224	\$	4,363,867

Revenue Recognition

The Company adopted Accounting Standards Codification ("ASC") 606, "Revenue from Contracts with Customers," issued by the Financial Accounting Standards Board ("FASB"), as of January 1, 2018 using the modified retrospective method. ASC 606 prescribes a five-step model for recognizing revenue which includes (i) identifying contracts with customers; (ii) identifying performance obligations; (iii) determining the transaction price; (iv) allocating the transaction price; and (v) recognizing revenue.

The Company recognizes net sales upon shipment of product to the dialysis centers and upon meeting the five-step model prescribed by ASC 606 outlined above.

In October 2015, the Company shipped product with less than 75% of its remaining shelf life to a customer and issued a guarantee that the specific product shipped would be replaced by the Company if the customer was not able to sell the product before it expired. As a result of this warranty, the Company may have an additional performance obligation (i.e. accept returned product and deliver new product to the customer) if the customer is unable to sell the short-dated product. As the result of the adoption of ASC 606, the Company accelerated the recognition of the deferred revenue and related cost of sales in the net amount of \$70,500 and recorded the warranty obligation in the amount of \$52,900 upon adoption.

Deferred Revenue

In August 2014, the Company entered into an exclusive distribution agreement (the "Wonik Agreement") with Wonik Corporation, a South Korean company, to market, sell and distribute Neutrolin for hemodialysis and oncolytic patients upon receipt of regulatory approval in South Korea. Upon execution, Wonik paid the Company a non-refundable \$50,000 payment and will pay an additional \$50,000 upon receipt of the product registration necessary to sell Neutrolin in South Korea (the "Territory"). The term of the Wonik Agreement commenced on August 8, 2014 and will continue for three years after the first commercial sale of Neutrolin in the Territory. The non-refundable up-front payment has been recorded as deferred revenue and will be recognized as revenue on a straight-line basis over the contractual term of the Agreement. Deferred revenue related to this agreement at December 31, 2018 and 2017 amounted to approximately \$11,000 and \$20,000, respectively.

Loss Per Common Share

Basic loss per common share excludes dilution and is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted loss per common share reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the entity.

The Company's outstanding Series C, Series D, Series E and Series F preferred stock entitle the holders to receive dividends on a basis equivalent to the dividends paid to holders of common stock. As a result, the Series C, Series D, Series E and Series F preferred stock meet the definition of participating securities requiring the application of the two-class method. Under the two-class method, earnings available to common shareholders, including both distributed and undistributed earnings, are allocated to each class of common stock and participating securities according to dividends declared and participating rights in undistributed earnings, which may cause diluted earnings per share to be more dilutive than the calculation using the treasury stock method. No loss has been allocated to these participating securities since they do not have contractual obligations that require participation in the Company's losses.

Since the Company has only incurred losses, basic and diluted loss per share are the same as potentially dilutive shares have been excluded from the calculation of diluted net loss per share as their effect would be anti-dilutive. The shares outstanding at the end of the respective periods presented below were excluded from the calculation of diluted net loss per share due to their anti-dilutive effect:

	Decembe	er 31,
	2018	2017
Series C non-voting preferred stock	2,540,000	2,540,000
Series D non-voting preferred stock	1,479,240	1,479,240
Series E non-voting preferred stock	1,959,759	1,959,759
Series F non-voting preferred stock	12,345,679	3,157,561
Shares issuable upon conversion of convertible debt	5,000,000	-
Restricted stock units	29,087	66,414
Shares issuable for payment of deferred board compensation	142,892	199,355
Shares underlying outstanding warrants	16,595,016	23,417,891
Shares underlying outstanding stock options	5,056,326	4,962,795
Total potentially dilutive shares	45,147,999	37,783,015

Stock-Based Compensation

Share-based compensation cost is measured at grant date, based on the estimated fair value of the award using the Black-Scholes option pricing model for options with service or performance-based conditions. Stock-based compensation is recognized as expense over the employee's requisite service period on a straight-line basis.

The Company accounts for stock options granted to non-employees on a fair value basis using the Black-Scholes option pricing model in accordance with ASC 718 and ASC No. 505-50, "Equity-Based Payments to Non-Employees". The non-cash charge to operations for non-employee options with time-based vesting provisions is based on the fair value of the options remeasured each reporting period and amortized to expense over the related vesting period. The non-cash charge to operations for non-employee options with performance-based vesting provisions is recorded when the achievement of the performance condition is probable and remeasured each reporting period until the performance condition is achieved.

Research and Development

Research and development costs are charged to expense as incurred. Research and development includes fees associated with operational consultants, contract clinical research organizations, contract manufacturing organizations, clinical site fees, contract laboratory research organizations, contract central testing laboratories, licensing activities, and allocated executive, human resources and facilities expenses. The Company accrues for costs incurred as the services are being provided by monitoring the status of the trial and the invoices received from its external service providers. As actual costs become known, the Company adjusts its accruals in the period when actual costs become known. Costs related to the acquisition of technology rights and patents for which development work is still in process are charged to operations as incurred and considered a component of research and development expense.

Income Taxes

Deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are established when it is more likely than not that some or all of the deferred tax assets will not be realized.

Debt Issuance Costs

The Company accounts for debt issuance costs as a direct deduction from the carrying amount of the respective debt liability, consistent with debt discounts. The Company amortizes the debt discount, including debt issuance costs over the term of the associated debt using the effective interest method.

Derivative Liability

The Company does not use derivative instruments to hedge exposures to cash flow, market or foreign currency risks; however, the Company had certain financial instruments in 2017 that qualified as derivatives and were classified as liabilities on the balance sheet. The Company evaluates all its financial instruments to determine if those instruments or any potential embedded components of those instruments qualify as derivatives that need to be separately accounted for in accordance with FASB ASC 815, "Derivatives and Hedging". Derivatives satisfying certain criteria are recorded at fair value at issuance and marked-to-market at each balance sheet date with the change in the fair value recorded as income or expense. In addition, upon the occurrence of an event that requires the derivative liability to be reclassified to equity, the derivative liability is revalued to fair value at that date and any change in value since the last re-measurement date is recorded as income or expense.

The Company accounts for stock warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreement. Stock warrants are classified as derivative liabilities if they can be cash settled or if there are insufficient authorized and unissued shares available to settle the contract after considering all other commitments that may require the issuance of stock during the maximum period the warrant could remain outstanding. Liability classified warrants are adjusted to their estimated fair values at each reporting period, with any decrease or increase in the estimated fair value being recorded in other income (expense).

In May 2017, the Company issued warrants that were liability-classified because there were insufficient shares of common stock available to settle the contracts. The carrying values of those warrants were adjusted to their estimated fair values at June 30, 2017 and again during the third quarter when sufficient additional common shares were authorized to cause the warrants to be reclassified as equity. The fair values on the issuance date and subsequent remeasurement dates were estimated using a probability-weighted option pricing model, requiring assumptions to be developed under different scenarios for the expected term, expected volatility, expected dividend yield and the risk-free interest rate. The Company estimated the expected term of the warrants based on the remaining contractual term. Expected volatility was calculated based on implied volatility of the stock price. The expected dividend yield is assumed to be zero in all scenarios because the Company has never, and has no plans at this time, to pay any dividends. To determine the risk free interest rate, the Company used the U.S. Treasury yield curve in effect at the time of the measurement with a term consistent with the remaining expected term of the warrant.

Recently Adopted Authoritative Pronouncements

The FASB issued new guidance in May 2014, as updated in April 2016 and May 2016, related to how an entity should recognize revenue. The guidance specifies that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods and services. In addition, the guidance expands the required disclosures related to revenue and cash flows from contracts with customers. The Company adopted the new revenue recognition standard as of January 1, 2018 using the modified retrospective method, which requires the cumulative effect of adoption to be recognized as an adjustment to opening retained earnings in the period of adoption. The majority of the Company's revenue relates to the sale of finished products to various customers, and the adoption did not have a material impact on revenue recognized from these transactions. The Company accelerated the remaining deferred revenue under these agreements and recorded the reserve for returns and allowances as cumulative effect adjustments to opening retained earnings at January 1, 2018 of \$43,162.

The following table presents the Company's revenue for the year ended December 31, 2018 under the ASC 606 model as compared to revenue under the previous guidance:

	Revenue Under					
		evenue As Reported		Previous Guidance		Difference
Net sales	\$	420,974	\$	420,974	\$	-
Revenue recognized under agreement with warranty		-		43,162		43,162
Revenue recognized under Wonik Agreement		8,823		8,823		-
Total net sales	\$	429,797	\$	472,959	\$	43,162

In May 2017, the FASB issued new guidance which clarifies the application of stock-based accounting guidance when a change is made to the terms or conditions of a share-based payment award. The guidance is effective for the Company beginning in the first quarter of fiscal year 2018. Early adoption is permitted. This adoption on January 1, 2018 did not have a material impact on the Company's consolidated financial statements.

In November 2016, the FASB issued new guidance which clarifies how restricted cash is presented and classified in the statement of cash flows. The guidance is effective for the Company beginning in the first quarter of fiscal year 2018. Early adoption is permitted. This adoption on January 1, 2018 did not have a material impact on the Company's consolidated financial statements.

In August 2016, the FASB issued new guidance which clarifies how certain cash receipts and cash payments are presented and classified in the statement of cash flows in order to reduce diversity in practice. The guidance is effective for us beginning in the first quarter of fiscal year 2018. Early adoption is permitted. This adoption on January 1, 2018 did not have a material impact on the Company's consolidated financial statements.

In January 2016, the FASB issued a new standard that modifies certain aspects of the recognition, measurement, presentation, and disclosure of financial instruments. The accounting standard update is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017, and early adoption is permitted. This adoption on January 1, 2018 did not have a material impact on the Company's consolidated financial statements.

Recent Authoritative Pronouncements

In November 2018, the FASB issued new guidance to clarify the interaction between the authoritative guidance for collaborative arrangements and revenue from contracts with customers. The new guidance clarifies that, when the collaborative arrangement participant is a customer in the context of a unit-of-account, revenue from contracts with customers guidance should be applied, adds unit-of-account guidance to collaborative arrangements guidance, and requires, that in a transaction with a collaborative arrangement participant who is not a customer, presenting the transaction together with revenue recognized under contracts with customers is precluded. The guidance is effective for the Company beginning in the first quarter of fiscal year 2020. Early adoption is permitted. The Company is assessing the impact of adopting this guidance on its consolidated financial statements.

In August 2018, the FASB issued a new guidance which modifies the disclosure requirements on fair value measurements. The guidance is effective for the Company beginning in the first quarter of fiscal year 2020. Early adoption is permitted. The Company is assessing the impact of adopting this guidance on its consolidated financial statements.

In June 2018, the FASB issued a new guidance which expands the scope of ASC 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The guidance is effective for the Company beginning in the first quarter of fiscal year 2019. Early adoption is permitted. This adoption on January 1, 2019 did not have a material impact on the Company's consolidated financial statements.

In July 2017, the FASB issued new guidance which changes the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features and recharacterizes the indefinite deferral of certain provisions within the guidance for distinguishing liabilities from equity. The guidance is effective for the Company beginning in the first quarter of fiscal year 2019. Early adoption is permitted. This adoption on January 1, 2019 did not have a material impact on the Company's consolidated financial statements.

In June 2016, the FASB issued new guidance which replaces the incurred loss impairment methodology in current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The guidance is effective for the Company beginning in the first quarter of fiscal year 2020. Early adoption is permitted beginning in the first quarter of fiscal year 2019. The Company is evaluating the impact of adopting this guidance on its consolidated financial statements.

In February 2016, the FASB issued new guidance related to how an entity should lease assets and lease liabilities. The guidance specifies that an entity who is a lessee under lease agreements should recognize lease assets and lease liabilities for those leases classified as operating leases under previous FASB guidance. Accounting for leases by lessors is largely unchanged under the new guidance. The guidance is effective for the Company beginning in the first quarter of 2019. Early adoption is permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach. This adoption on January 1, 2019 did not have a material impact on the Company's consolidated financial statements.

Note 4 — Related Party Transactions:

On December 31, 2018, the Company entered into a securities purchase agreement with Manchester Securities Corp., an existing institutional investor and an affiliate of Elliott Associates, L.P. ("Elliott"), for the purchase and sale of a senior secured convertible note in the aggregate principal amount of \$7,500,000 and a warrant to purchase up to an aggregate of 450,000 shares of the Company's common stock, for gross proceeds of \$7,500,000, see Note 6. The warrant with a grant date fair value of \$433,365, is immediately exercisable, has an exercise price of \$1.50 per share, subject to adjustment in the event of stock dividends and distributions, stock splits, stock combinations, or reclassifications affecting our common stock, and has a term of five years. The note has a conversion price of \$1.50 per share. The conversion price is subject to appropriate adjustment in the event of stock dividends and distributions, stock splits, stock combinations, or reclassifications affecting our common stock.

In December 2017, the Company issued an aggregate of 624,246 shares of its common stock in a financing transaction to its directors and executive officers and to certain of its employees at a per share purchase price of \$0.48, which was the closing price of the stock on November 16, 2017, the date before the purchase agreements were executed. This common stock financing reduced the number of shares issuable under the warrants that the Company was required to issue to Elliott pursuant to the Backstop Agreement (see below). The Company realized gross proceeds of approximately \$300,000. The following related parties participated in the common stock financing:

			Number of
		 Amount	Shares
Khoso Baluch	CEO and Director	\$ 50,000	104,166
Robert W. Cook	CFO	\$ 25,000	52,083
John Armstrong	Executive VP	\$ 10,000	20,833
Myron Kaplan	Chairman of the Board	\$ 50,000	104,166
Janet Dillione	Director	\$ 25,000	52,083
Gary Gelbfish	Director	\$ 25,000	52,083
Mehmood Khan	Director	\$ 25,000	52,083
Steven W. Lefkowitz	Director	\$ 65,000	135,416

The terms of purchase were identical for each purchaser. The Audit Committee of the Board of Directors approved the purchase by these insiders.

On November 29, 2017, the Company hired Dr. Gary Gelbfish, one of its directors, as a consultant to assist in the Company's interim analysis for its LOCK-IT-100 clinical trial for Neutrolin. Pursuant to the consulting agreement between the Company and Dr. Gelbfish, in September 2018 the Company paid \$210,000 in fees submitted by Dr. Gelbfish under the consulting agreement for his work in the data quality review for the interim analysis of the Company's LOCK-IT-100 clinical trial for Neutrolin. Under the terms of the consulting agreement, Dr. Gelbfish was compensated at the rate of \$800 per hour. The consulting agreement expired on September 30, 2018.

In November 2017, the Company entered into a securities purchase agreement with Elliott, our largest shareholder, whereby they purchased a newly issued CorMedix Series F convertible preferred stock at \$1,000 per share. (See Note 8 – Stockholders' Equity). Separately, on November 9, 2017, the Company entered into a backstop agreement with the Elliott to purchase up to an additional \$3.0 million of Series F convertible preferred stock at \$1,000 per share, (the "Backstop Agreement"), at the Company's sole discretion, beginning January 15, 2018, through March 31, 2018. Gross proceeds of the securities purchase agreement and the Backstop Agreement, if the Backstop Agreement were to be used in full, total an aggregate of \$5.0 million. As consideration for the Backstop Agreement, the Company issued 564,858 warrants, exercisable for three years, to purchase shares of the Company's common stock at a per share exercise price of \$0.001. The number of shares issuable under the warrant was determined by the closing price of the Company's common stock on November 8, 2017, which was \$0.5278, reduced by the amount of equity capital raised from the Company's ATM program and the sale of common stock to directors, executive officers and other certain employees of the Company totaling \$2.4 million. Elliott may convert the preferred stock into common stock at its option at a price of \$0.162 per share. The preferred stock was mandatorily convertible on April 2, 2018, subject to certain equity conditions. As of December 31, 2018, the last condition had not been met, which condition is the subordination of the outstanding Series C-3 preferred stock to the Series F Stock. Therefore, the Series F Stock is not mandatorily convertible as of December 31, 2018; the conversion price per share of \$0.162, however, remains fixed, subject to anti-dilution adjustment, including full ratchet. When and if that condition is met, the Series F Stock will be mandatorily convertible. No warrants were issued under the securities purchase agreement. The B

Until the date that none of the preferred stock or warrants that we issued to Elliott in November 2017 as part of the backstop financing are outstanding, we are prohibited from issuing or selling any securities convertible into common stock at a conversion price of below \$0.162 per share on terms more favorable than the backstop financing terms and with a conversion, exchange or exercise price that is based upon and/or varies with the trading prices of or quotations for the shares of our common stock or that is subject to being reset at some future date or upon the occurrence of specified or contingent events directly or indirectly related to our business (other than pursuant to a customary "weighted average" anti-dilution provision) or the market for our common stock or enter into any agreement to sell securities at a future determined price (other than standard and customary "preemptive" or "participation" rights and other than pursuant to an at-the-market offering through a registered broker-dealer). Under certain conditions, this restriction could make raising capital through the sale of equity securities difficult and could have a material adverse impact on our business, financial condition and prospects.

On April 28, 2017, the Company entered into an underwriting agreement with H.C. Wainwright & Co., LLC, relating to an underwritten public offering of 16,190,697 shares of its common stock, together with Series A warrants to purchase up to an aggregate of 12,143,022 shares of its common stock and Series B warrants to purchase up to an aggregate of 12,143,022 shares of its common stock, at a price to the public of \$0.75 per share and related warrants. Pursuant to Manchester's participation rights, Elliott Associates, L.P. and Elliott International, L.P., affiliates of Manchester (together, "Elliott") collectively purchased an aggregate of 2,666,668 shares of common stock, Series A warrants to purchase up to 2,000,000 shares of common stock, and Series B warrants to purchase up to 2,000,000 shares of common stock. Gary Gelbfish, a director of the Company at that time, purchased 1,333,334 shares of common stock, Series A warrants to purchase up to 1,000,000 shares, and Series B warrants to purchase up to 1,000,000 shares of our common stock. The purchases by Elliott and Dr. Gelbfish were on the same terms as those for all other investors.

In September 2014, as part of the removal of anti-dilution, price reset and change of control provisions in various securities that had caused those securities to be classified as derivative liabilities, the Company entered into a Consent and Exchange Agreement with Manchester Securities Corp., a subsidiary of Elliott Associates, L.P. ("Manchester"), pursuant to which Manchester had a right of 60% participation in equity financings undertaken by the Company prior to September 15, 2017. Pursuant to this right of participation, Manchester elected partial participation in the equity financing that the Company closed on May 3, 2017 and invested \$2,000,000.

Note 5 — Income Taxes:

The Company's U.S. and foreign loss before income taxes are set forth below:

	Decem	ber 31,
	2018	2017
United States	\$ (25,882,114)	\$ (31,992,324)
Foreign	(947,516)	(1,017,699)
Total	\$ (26,829,630)	\$ (33,010,023)

There were no current or deferred income tax provision for the years ended December 31, 2018 and 2017 because the Company has incurred operating losses since inception.

The Company's deferred tax assets consist of the following:

	Dece	ember 31,
	2018	2017
Net operating loss carryforwards – Federal	\$ 29,303,000	\$ 23,833,000
Net operating loss carryforwards – State	8,441,000	7,264,000
Net operating loss carryforwards – Foreign	1,876,000	1,678,000
Capitalized licensing fees	912,000	1,068,000
Stock-based compensation	2,447,000	2,232,000
Accrued compensation	307,000	206,000
Other	110,000	65,000
Totals	43,396,000	36,346,000
Less valuation allowance	(43,396,000)	(36,346,000)
Deferred tax assets	\$ -	\$ -

The Company had the following potentially utilizable net operating loss tax carryforwards:

		December 31,		
	_	2018	2017	
Federal	\$	139,538,000	\$ 113,492,000	
State	\$	118,719,000	\$ 102,159,000	
Foreign	\$	6,250,000	\$ 5,594,000	

The net operating loss tax generated before January 1, 2018 carryforwards will start to expire in 2027 for Federal purposes and have already begun to expire for state purposes. The current Tax Cuts and Jobs Act (the "Act") limits the net operating loss deduction to 80% of taxable income for losses arising in tax years beginning after December 31, 2017. However, the net operating losses now have an indefinite carryforward as opposed to the current 20-year carryforward. The foreign net operating loss tax carryforwards do not expire. Our federal and state operating loss carryforwards include windfall tax deductions from stock option exercises.

The utilization of the Company's federal and state net operating losses may be subject to a substantial limitation due to the "change of ownership provisions" under Section 382 of the Internal Revenue Code and similar state provisions. Such limitation may result in the expiration of the net operating loss carryforwards before their utilization.

The Company's foreign earnings are derived from its German subsidiary. The Company does not expect any foreign earnings to be repatriated in the U.S. in the near future.

The Company's effective tax rate varied from the statutory rate as follows:

	December 31,		
	2018	2017	
Statutory Federal tax rate	21.0%	34.0%	
State income tax rate (net of Federal)	4.5%	6.3%	
Effect of foreign operations	1.1%	0.9%	
Non-deductible expenses associated with derivative liabilities	0.0%	0.0%	
Warrant related expenses	0.0%	0.0%	
Federal Deferred Tax Rate Change	0.0%	(45.7)%	
Other permanent differences	(0.3)%	0.1%	
Effect of valuation allowance	(26.3)%	4.4%	
Effective tax rate	0.0%	0.0%	

In assessing the realizability of deferred tax assets, management considers whether it is more-likely-than-not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income of the appropriate character during the periods in which those temporary differences become deductible and the loss carryforwards are available to reduce taxable income. In making its assessment, the Company considered all sources of taxable income including carryback potential, future reversals of existing deferred tax liabilities, prudent and feasible tax planning strategies, and lastly, objectively verifiable projections of future taxable income exclusive of reversing temporary differences and carryforwards. At December 31, 2018 and 2017, the Company maintained a full valuation allowance against its net deferred tax assets. The Company will continue to assess all available evidence during future periods to evaluate the realization of its deferred tax assets.

The following table presents the changes in the deferred tax asset valuation allowance for the periods indicated:

	Balance at Beginning of	(Decrease) Charged (Credited) to Income Taxes	Increase (Decrease) Charged	Balance at End of
Year Ended	Year	(Benefit)	(Credited) to OCI	Year
December 31, 2018	\$ 36,346,000	\$ 7,082,000	\$ (32,000)	\$ 43,396,000
December 31, 2017	\$ 37,811,000	\$ (1,433,000)	\$ (32,000)	\$ 36,346,000

Accounting for uncertainty in income taxes requires uncertain tax positions to be classified as non-current income tax liabilities unless they are expected to be paid within one year. The Company has concluded that there are no uncertain tax positions requiring recognition in its consolidated financial statements as of December 31, 2018 and 2017. The Company recognizes interest and penalties related to uncertain tax positions if any as a component of income tax expense.

The Company files income tax returns in the U.S. federal, state and foreign jurisdictions. Tax years 2014 to 2018 remain open to examination for both the U.S. federal and state jurisdictions. Tax years 2015 to 2017 remain open for Germany.

Note 6 — Senior Secured Convertible Note:

On December 31, 2018, the Company entered into a securities purchase agreement with Elliott, for the purchase and sale of a senior secured convertible note in the aggregate principal amount of \$7,500,000 and a warrant to purchase up to an aggregate of 450,000 shares of our common stock, for gross proceeds of \$7,500,000.

The note is a senior obligation, secured by all of the Company's assets. The note bears interest at the rate of 10.0% per annum, compounded quarterly. Interest is first payable on January 2, 2019, and on the first trading day of each month thereafter. The note matures on December 30, 2021. Any accrued but unpaid interest for the applicable interest period will be added to the principal outstanding under the notes. The note has a conversion price of \$1.50 per share. The conversion price is subject to appropriate adjustment in the event of stock dividends and distributions, stock splits, stock combinations, or reclassifications affecting our common stock. The noteholder may convert its outstanding note principal amount, and any accrued and unpaid interest, at any time into shares of common stock at the conversion rate. Additionally, the note will automatically convert into shares of common stock if, prior to the maturity date, the average closing sale price of the Company's common stock for any 20 trading days during any consecutive 30 trading days equals or exceeds 150% of the conversion price. The Company has the right to pay any accrued interest in cash for any calendar month during which the average closing sale price of its common stock averaged at least 150% of the conversion price of the notes. On or after July 1, 2020, the Company may prepay any principal amount outstanding on the notes in amounts of \$2,000,000 (or in full, if less than \$2,000,000), provided that if the prepayment occurs between July 2, 2020 and March 30, 2021, the prepayment amount will equal 110% of the principal amount being repaid and if the prepayment occurs after March 31, 2021, the prepayment amount will equal 105% of the principal amount being repaid.

The warrant is immediately exercisable, has an exercise price of \$1.50 per share, subject to adjustment in the event of stock dividends and distributions, stock splits, stock combinations, or reclassifications affecting our common stock, and has a term of five years. The closing of the note and warrant sale and purchase occurred simultaneously with entry into the securities purchase agreement. No placement agent or underwriter was involved in the offering.

On the same date, and in connection with the sale of the note and warrant, the Company amended and restated the following warrants held by Elliott and its affiliates to reduce the exercise price of each warrant to \$0.001 per share: warrants issued in May 2013 to purchase up to an aggregate of 500,000 shares of the Company's common stock with a pre-amendment exercise price of \$0.65 per share and an expiration date of May 30, 2019 (the "May 30, 2019 Warrants"); and warrants issued in October 2013 to purchase up to an aggregate of 750,000 shares of our common stock with a pre-amendment exercise price of \$0.90 per share and an expiration date of October 22, 2019 (the "October 22, 2019 Warrants"). The amendment of these warrants was previously reported on December 21, 2018; the amendment and restatement of these warrants simply memorializes the amendment to the respective exercise prices.

Also in conjunction with the closing of the sale and issuance, the Company and Elliott and certain of its affiliates that hold shares of various series of the Company's preferred stock and warrants to purchase shares of the Company's common stock agreed to waive any rights of conversion or exercise for all of the shares of its Series C-2, D, E and F preferred stock, as well as warrants to purchase an aggregate of 4,014,859 shares of its common stock (collectively with the shares of Series C-2, D, E, and F preferred stock, the "Elliott Derivative Securities"), until the earliest to occur of (i) the effective date on which the Company's Certificate of Incorporation is amended to increase the number of authorized shares of common stock, (ii) the effective date on which the Company effects a reverse stock split of its common stock, (iii) one business day immediately prior to the consummation of a fundamental transaction (as defined in the instruments governing the applicable Elliott Derivative Securities), and (iv) April 30, 2019. The 1-for-5 reverse stock split that we have announced that we intend to effect on March 26, 2019, when effective, will satisfy this condition and Elliott will be able to convert and exercise all of the preferred shares and warrants cited above.

As long as any of the Series C-2, Series D, Series E or Series F non-voting convertible preferred stock is outstanding, the Company cannot, without the consent of a majority of those series preferred holders, incur any indebtedness other than trade payables incurred in the ordinary course of business consistent with past practice, and letters of credit incurred in an aggregate amount of \$3.0 million at any point in time. Elliott is the holder of all of the shares of the Series C-2, Series D, Series E and Series F non-voting convertible preferred stock and implicitly consented to the convertible note financing.

The \$7,500,000 in gross proceeds, along with the legal fees of approximately \$109,000, were allocated between the senior secured convertible note and warrants based on their relative fair values. The portion of the proceeds allocated to the warrants of approximately \$396,000, net of allocated fees of approximately \$6,000, was accounted for as additional paid-in capital. The remainder of the proceeds of approximately \$6,995,000, net of allocated fees of approximately \$103,000 was allocated to the senior convertible note, with the fair value of the warrants resulting in a debt discount. In addition, the incremental cost of approximately \$710,000 associated with the warrant modification was recorded as a debt discount. An additional debt discount of approximately \$143,000 was recorded as a beneficial conversion feature as the stock price was greater than the effective conversion price (after allocation of the total proceeds) on the measurement date.

The Company used a hybrid valuation model to determine the fair value of the senior secured convertible note. The hybrid model incorporated both a present value analysis and the use of the Black Scholes option pricing model to reflect the senior secured convertible note's conversion feature. The Black-Scholes option pricing model was also used to determine the fair value of the warrants in order to allocate the gross proceeds based on relative fair values, see Note 8. ASC 820, Fair Value Measurements, states that the reporting entity should use the valuation technique(s) appropriate for the measurement, considering the availability of data with which to develop inputs that represent the assumptions that market participants would use when pricing the asset or liability. Market participants price options based on expected volatility, not historical volatility. In estimating, the expected volatility of the Company's common stock followed the guidance of ASC 820 and considered a number of factors - including the implied volatility of the Company's listed warrant contracts.

A summary of the assumptions used in the Black Scholes pricing model are as follows:

	Conversion	
	Option	New Warrants
	At Issuance Date	At Issuance Date
Expected term (months)	36	60
Volatility	161.5%	161.5%
Dividend yield	0%	0%
Risk-free interest rate	2.43%	2.48%

Note 7 — Commitments and Contingencies:

Contingency Matters

On September 9, 2014, the Company filed in the District Court of Mannheim, Germany a patent infringement action against TauroPharm GmbH and Tauro-Implant GmbH as well as their respective CEOs (the "Defendants") claiming infringement of the Company's European Patent EP 1 814 562 B1, which was granted by the European Patent Office (the "EPO") on January 8, 2014 (the "Prosl European Patent"). The Prosl European Patent covers the formulation of taurolidine and citrate with low dose heparin in a catheter lock solution for maintaining patency and preventing infection in hemodialysis catheters. In this action, the Company claims that the Defendants infringe on the Prosl European Patent by manufacturing and distributing catheter locking solutions to the extent they are covered by the claims of the Prosl European Patent. The Company believes that its patent is sound and is seeking injunctive relief and raising claims for information, rendering of accounts, calling back, destruction and damages. Separately, TauroPharm has filed an opposition with the EPO against the Prosl European Patent alleging that it lacks novelty and inventive step. The Company cannot predict what other defenses the Defendants may raise, or the ultimate outcome of either of these related matters.

In the same complaint against the same Defendants, the Company also alleged an infringement (requesting the same remedies) of ND Partners' utility model DE 20 2005 022 124 U1 (the "Utility Model"), which the Company believes is fundamentally identical to the Prosl European Patent in its main aspects and claims. The Court separated the two proceedings and the Prosl European Patent and the Utility Model claims are now being tried separately. TauroPharm has filed a cancellation action against the Utility Model before the German Patent and Trademark Office (the "German PTO") based on the similar arguments as those in the opposition against the Prosl European Patent.

On March 27, 2015, the District Court held a hearing to evaluate whether the Utility Model has been infringed by TauroPharm in connection with the manufacture, sale and distribution of its TauroLock-HEP100TM and TauroLock-HEP500TM products. A hearing before the same court was held on January 30, 2015 on the separate, but related, question of infringement of the Prosl European Patent by TauroPharm.

The Court issued its decisions on May 8, 2015, staying both proceedings. In its decisions, the Court found that the commercialization by TauroPharm in Germany of its TauroLock catheter lock solutions Hep100 and Hep500 infringes both the Prosl European Patent and the Utility Model and further that there is no prior use right that would allow TauroPharm to continue to make, use or sell its product in Germany. However, the Court declined to issue an injunction in favor of the Company that would preclude the continued commercialization by TauroPharm based upon its finding that there is a sufficient likelihood that the EPO, in the case of the Prosl European Patent, or the German PTO, in the case of the Utility Model, may find that such patent or utility model is invalid. Specifically, the Court noted the possible publication of certain instructions for product use that may be deemed to constitute prior art. As such, the District Court determined that it will defer any consideration of the request by the Company for injunctive and other relief until such time as the EPO or the German PTO made a final decision on the underlying validity of the Prosl European Patent and the Utility Model.

The opposition proceeding against the Prosl European Patent before the EPO is ongoing. The EPO held a hearing in the opposition proceeding on November 25, 2015. In its preliminary consideration of the matter, the EPO (and the German PTO) had regarded the patent as not inventive or novel due to publication of prior art. However, the EPO did not issue a decision at the end of the hearing but adjourned the matter due to the fact that the panel was of the view that Claus Herdeis, one of the managing directors of TauroPharm, had to be heard as a witness in a further hearing in order to close some gaps in the documentation presented by TauroPharm as regards the publication of the prior art.

The German PTO held a hearing in the validity proceedings relating to the Utility Model on June 29, 2016, at which the panel affirmed its preliminary finding that the Utility Model was invalid based upon prior publication of a reference to the benefits that may be associated with adding heparin to a taurolidine based solution. The decision has only a declaratory effect, as the Utility Model had expired in November 2015. Furthermore, it has no bearing on the ongoing consideration by the EPO of the validity and possible infringement of the Prosl European Patent. The Company filed an appeal against the ruling on September 7. 2016.

In October 2016, TauroPharm submitted a further writ to the EPO requesting a date for the hearing and bringing forward further arguments, in particular in view of the June 2016 decision of the German PTO on the invalidity of the utility model, which the Company has appealed. On November 22, 2017, the EPO in Munich, Germany held a further oral hearing in this matter. At the hearing, the panel held that the Prosl European Patent would be invalidated because it did not meet the requirements of novelty based on a technical aspect of the European intellectual property law. The Company disagrees with this decision and, after the written opinion was issued by the Opposition Division in September 2018, has appealed the decision. The Company continues to believe that the Prosl European Patent is indeed novel and that its validity should be maintained. There can be no assurance that the Company will prevail in this matter with either the German PTO or the EPO. In addition, the ongoing Unfair Competition litigation brought by the Company against TauroPharm is not affected and will continue.

On January 16, 2015, the Company filed a complaint against TauroPharm GmbH and its managing directors in the District Court of Cologne, Germany. In the complaint, the Company alleges violation of the German Unfair Competition Act by TauroPharm for the unauthorized use of its proprietary information obtained in confidence by TauroPharm. The Company alleges that TauroPharm is improperly and unfairly using its proprietary information relating to the composition and manufacture of Neutrolin, in the manufacture and sale of TauroPharm's products TauroLockTM, TauroLock-HEP100 and TauroLock-HEP500. The Company seeks a cease and desist order against TauroPharm from continuing to manufacture and sell any product containing taurolidine (the active pharmaceutical ingredient ("API") of Neutrolin) and citric acid in addition to possible other components, damages for any sales in the past and the removal of all such products from the market. An initial hearing in the District Court of Cologne, Germany, was held on November 19, 2015 to consider the Company's claims. In this hearing, the presiding judge explained that the court needed more information with regard to several aspects of the case. As a consequence, the court issued an interim decision in the form of a court order outlining several issues of concern that relate primarily to the court's interest in clarifying the facts and reviewing any and all available documentation, in particular with regard to the question which specific know-how was provided to TauroPharm by whom and when. The Company's legal team prepared the requested reply and produced the respective documentation. TauroPharm also filed another writ within the same deadline and both parties filed further writs at the end of April 2016 setting out their respective argumentation in more detail. A further oral hearing in this matter was held on November 15, 2016. In this hearing, the court heard arguments from CorMedix and TauroPharm concerning the allegations of unfair competition. The court made no rulings from the bench and indicated that it is prepared to further examine the underlying facts of the Company's allegations. On March 7, 2017, the court issued another interim decision in the form of a court order outlining again several issues relating to the argumentation of both sides in the proceedings. In particular, the court requested the Company to further specify its requests and to further substantiate in even more detail which know-how was provided by Biolink to TauroPharm by whom and when. The court also raised the question whether the know-how provided at the time to TauroPharm could still be considered to be secret know-how or may have become public in the meantime. The court granted both sides the opportunity to reply to this court order and provide additional facts and evidence until May 15, 2017. Both parties submitted further writs in this matter and the court scheduled a further hearing on May 8, 2018. After having been rescheduled several times, the hearing took place on November 20, 2018. A decision was rendered by the court on December 11, 2018, dismissing the complaint in its entirety. However, the Company intends to continue to pursue this matter and still believes firmly that its claims are wellfounded. Therefore, the Company appealed in January 2019.

In connection with the aforementioned patent and utility model infringement proceedings against TauroPharm, the Company was required by the District Court Mannheim to provide a security deposit of approximately \$132,000 to cover legal fees in the event TauroPharm is entitled to reimbursement of these costs. The Company recorded the deposit as restricted cash for the year ended December 31, 2015. The Company furthermore had to provide a deposit in the amount of \$40,000 in connection with the unfair competition proceedings in Cologne. These amounts are shown as restricted cash on the condensed consolidated balance sheets.

Commitments

Clinical and Regulatory

In December 2015, the Company entered into a Master Service Agreement and Work Orders (the "Master Service Agreement") with a CRO to help the Company conduct its LOCK-IT-100 Phase 3 multicenter, double-blind, randomized active control study to demonstrate the safety and effectiveness of Neutrolin in preventing catheter-related bloodstream infections and blood clotting in subjects receiving hemodialysis therapy as treatment for end stage renal disease. In May 2017, the Company signed a contract modification with its CRO for an additional budgeted cost of \$7.2 million to cover the extension of the estimated study timeline, incorporate several protocol amendments and assume several new tasks related to the enrollment sites. Given the changes to the study agreed with the FDA, the Company signed a second contract modification with its CRO increasing the budget by an additional \$6.3 million, to cover the continuation of trial enrollment, the increased length of time in which patients are enrolled and additional activities related to the collection of retrospective data outside the treatment centers. During the years ended December 31, 2018 and 2017, the Company recognized \$7,658,000 and \$14,380,000 in research and development expense related to this agreement, respectively.

Through December 31, 2018, approximately \$28.4 million of clinical trial expense has been recorded in connection with the Master Service Agreement and new work orders, of which approximately \$24.0 million has been paid. During 2018, the Company had contested a substantial amount of the unpaid clinical trial expense accrued during 2018 due to the unexpected delay and additional costs the Company incurred in preparing for the interim analysis of the LOCK-IT-100 study. Negotiations with the CRO concluded in November 2018 with the signing of a confidential settlement agreement in which the Company received cash, credits and other consideration in return for agreeing to make cumulative net payments to its CRO of approximately \$6.2 million through January 2019, plus investigator fees and third-party costs that had not been invoiced as of September 30, 2018. Among other benefits, the settlement agreement resulted in full satisfaction of all outstanding accounts payable and accrued expenses recorded as of September 30, 2018 in connection with the Master Services Agreement. Additionally, in parallel with the settlement agreement, a new work order under the Master Service Agreement was executed specifying certain services the CRO will continue to provide to the Company related to the closeout of the study. The budgeted amount of the new work order is approximately \$1.4 million of which \$588,000 was incurred as of December 31, 2018. At December 31, 2018, the Company had accrued \$4,372,000 in accounts payable and accrued expenses related to the settlement agreement and the new work order.

In-Licensing

In 2008, the Company entered into a License and Assignment Agreement (the "NDP License Agreement") with ND Partners, LLP ("NDP"). Pursuant to the NDP License Agreement, NDP granted the Company exclusive, worldwide licenses for certain antimicrobial catheter lock solutions, processes for treating and inhibiting infections, a biocidal lock system and a taurolidine delivery apparatus, and the corresponding United States and foreign patents and applications (the "NDP Technology"). The Company acquired such licenses and patents through its assignment and assumption of NDP's rights under certain separate license agreements by and between NDP and Dr. Hans-Dietrich Polaschegg, Dr. Klaus Sodemann and Dr. Johannes Reinmueller. As consideration in part for the rights to the NDP Technology, the Company paid NDP an initial licensing fee of \$325,000 and granted NDP a 5% equity interest in the Company, consisting of 39,980 shares of the Company's common stock.

The Company is required to make payments to NDP upon the achievement of certain regulatory and sales-based milestones. Certain of the milestone payments are to be made in the form of shares of common stock currently held in escrow for NDP, and other milestone payments are to be paid in cash. The maximum aggregate number of shares issuable upon achievement of milestones is 145,543 shares. In 2014, a certain milestone was achieved resulting in the release of 36,386 shares held in escrow. The number of shares held in escrow as of December 31, 2018 is 109,157 shares of common stock. The maximum aggregate amount of cash payments due upon achievement of milestones is \$3,000,000 with the balance being \$2,500,000 as of December 31, 2018 and 2017. Events that trigger milestone payments include but are not limited to the reaching of various stages of regulatory approval and upon achieving certain worldwide net sales amounts. There were no milestones achieved during the years ended December 31, 2018 and 2017.

The NDP License Agreement may be terminated by the Company on a country-by-country basis upon 60 days prior written notice. If the NDP License Agreement is terminated by either party, the Company's rights to the NDP Technology will revert back to NDP.

Other

In September 2017, the Company entered into a sublease agreement for approximately 6,960 square feet of office space in Berkeley Heights, New Jersey, which sublease runs from September 15, 2017 to June 29, 2020. This sublease is rent-free to the Company.

Note 8 — Stockholders' Equity:

Common Stock:

The Company had a prior sales agreement with B. Riley for its ATM program, which expired on April 16, 2018, under which the Company could issue and sell up to an aggregate of \$60.0 million of shares of its common stock. On March 9, 2018, the Company entered into a new agreement with B. Riley for the sale of up to \$14.7 million of the Company's common stock under the ATM program, pursuant to a registration statement filed on March 9, 2018 for an aggregate of \$70 million of the Company's securities, which became effective on April 16, 2018. The ATM program amount was increased by \$25.0 million in November 2018. Under the ATM program, the Company may issue and sell common stock from time to time through B. Riley acting as agent, subject to limitations imposed by the Company and subject to B. Riley's acceptance, such as the number or dollar amount of shares registered under the registration statement to which the offering relates. B. Riley is entitled to a commission of up to 3% of the gross proceeds from the sale of common stock sold under the ATM program. During the years ended December 31, 2018 and 2017, the Company sold 35,888,772 and 5,239,815 shares of common stock under the new and expired ATM programs, respectively, and realized net proceeds of approximately \$22.0 million and \$3.5 million during the years ended December 31, 2018 and 2017, respectively. At December 31, 2018, the Company has approximately \$20.3 million available under its current ATM program and \$30.3 million available under its current ATM program.

During the year ended December 31, 2018, the Company issued an aggregate of 131,826 shares of its common stock upon the vesting of restricted stock units issued to the Company's board of directors. The Company also issued an aggregate of 127,628 shares of its common stock to its certain board members for payment of deferred fees.

On May 3, 2017, the Company closed an underwritten public offering of 18,619,301 shares of its common stock, par value \$0.001 per share, together with Series A warrants ("Series A Warrants") to purchase up to an aggregate of 13,964,476 shares of its common stock and Series B warrants ("Series B Warrants") to purchase up to an aggregate of 13,964,476 shares of its common stock. Series A Warrants had an exercise price of \$0.75 per share of common stock and expired thirteen months following the Exercisable Date (defined below). Series B Warrants have an exercise price of \$1.05 per share of common stock and will expire five years following the Exercisable Date. The net proceeds from this public offering was approximately \$12.8 million.

The Company issued to the underwriter warrants to purchase up to an aggregate of 1,117,158 shares of common stock, with an exercise price of \$0.9375, which represents 125% of the public offering price per combined share and related warrants. The underwriter warrant expires five years following the Exercisable Date. Other than the exercise price, the terms of the underwriter warrants are the same as the Series B Warrants.

In May 2017, the Company did not have a sufficient number of authorized shares of common stock to cover the shares issuable upon exercise of the warrants issued in the May 2017 public offering and therefore classified the fair value of the warrants as a derivative liability at June 30, 2017. On August 8, 2017, the Company's shareholders approved the amendment of the Company's amended and restated Certificate of Incorporation (the "Charter Amendment") increasing the shares of authorized capital stock from 82,000,000 shares to 162,000,000 shares and increasing the number of authorized shares of common stock from 80,000,000 to 160,000,000 shares. The fair value of these warrants was re-measured on August 10, 2017, the date the warrants became exercisable (the "Exercisable Date"), with the increase in value recorded as a loss in the statement of operations. The fair value of the warrants at August 10, 2017 was reclassified then from liability to equity.

In December 2017, the Company sold an aggregate of 624,246 shares of its common stock to its directors and executive officers and to certain of its employees at a per share purchase price of \$0.48. The Company realized gross proceeds of approximately \$300,000 (see Note 4 – Related Party Transactions).

During the year ended December 31, 2017, the Company entered into warrant exchange agreements whereby the Company agreed to exchange with various investors (the "Investors") Series A warrants issued in its May 2017 public offering of common stock and warrants. The exchanged warrants provided for the purchase of up to an aggregate of 9,886,250 shares of the Company's common stock at an exercise price of \$0.75, with an expiration date of September 10, 2018. The Company issued an aggregate of 2,471,561 shares of common stock to the Investors in exchange for these warrants.

Restricted Stock Units

During the year ended December 31, 2018 and 2017, the Company granted an aggregate of 94,500 and 112,931 restricted stock units ("RSUs") to its officers and directors under its 2013 Stock Incentive Plan with a weighted average grant date fair value of \$0.70 and \$2.15 per share, respectively. These RSUs vest over various dates through October 2019. During the year ended December 31, 2018 and 2017, compensation expense recorded for these RSUs was \$93,000 and \$88,000, respectively. Unrecognized compensation expense as of December 31, 2018 and 2017 was \$23,000 and \$50,000, respectively. The expected weighted average period for the expense to be recognized is 0.34 years. During the year ended December 31, 2018, no RSUs were forfeited and 46,517 RSUs were forfeited during the year ended December 31, 2017.

Preferred Stock

The Company is authorized to issue up to 2,000,000 shares of preferred stock in one or more series without stockholder approval. The Company's board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. Of the 2,000,000 shares of preferred stock authorized, the Company's board of directors has designated (all with par value of \$0.001 per share) the following:

	As of I	As of December 31, 2018 and 2017			
		Liquidation			
	Preferred Shares	Preference (Per	Total Liquidation		
	Outstanding	Share)	Preference		
Series C-2	150,000	10.0	1,500,000		
Series C-3	104,000	10.0	1,040,000		
Series D	73,962	21.0	1,553,202		
Series E	89,623	49.2	4,409,452		
Series F	2,000	1,000	2,000,000		
Total	419,585		10,502,654		

On November 9, 2017, the Company entered into a securities purchase agreement with Elliott, pursuant to which, on November 16, 2017, the Company sold \$2.0 million of its Series F convertible preferred stock ("Series F Stock") at \$1,000 per share. Based on the terms of the Series F Stock, the conversion price was set at \$0.162 on April 2, 2018, and the shares are currently convertible anytime at Elliott's option. The Series F Stock will be mandatorily convertible if certain equity conditions are met. As of December 31, 2018, the last condition had not been met, which condition is the subordination of the outstanding Series C-3 preferred stock to the Series F Stock. Therefore, the Series F Stock is not mandatorily convertible as of December 31, 2018; the conversion price per share of \$0.162, however, remains fixed, subject to anti-dilution adjustment, including full ratchet. When and if that condition is met, the Series F Stock will be mandatorily convertible. Pursuant to the terms of the Series F Stock, a holder will be prohibited from converting shares of Series F Stock into shares of common stock if, as a result of such conversion, (i) such holder, together with its affiliates, would beneficially own more than 9.99% of the total number of shares of the Company's common stock then issued and outstanding, or (ii) the Company would issue shares in an amount equal to or greater than 13,336,939 shares, which is 20% of the shares of common stock outstanding on November 9, 2017, unless the Company has received the approval of its stockholders for such overage.

The Series F Stock is non-voting and has no dividend right outside of receiving dividends in the same form as the Company pays to holders of shares of its common stock.

As long as any of the Series F non-voting convertible preferred stock is outstanding, the Company cannot, without the consent of a majority of the Series F holders, incur any indebtedness other than trade payables incurred in the ordinary course of business consistent with past practice, and letters of credit incurred in an aggregate amount of \$3.0 million at any point in time.

In the event of the Company's liquidation, dissolution, or winding up, holders of the Series F Stock will receive a payment equal to \$1,000 per share of Series F Stock, subject to adjustment, before any proceeds are distributed to the holders of common stock. Shares of the Series F Stock will rank:

- senior to all common stock and the Series C-2, Series C-3 Convertible Preferred Stock (subject to the Company obtaining any consent, waiver or other
 authorization from the holders of the Series C-3 Convertible Preferred Stock necessary for the subordination of the Series C-3 Convertible Preferred
 Stock to the Series F Preferred Stock), Series D Non-Voting Convertible Preferred Stock, Series E Non-Voting Convertible Stock; and
- senior to any class or series of capital stock hereafter created.

in each case, as to distributions of assets upon our liquidation, dissolution or winding up whether voluntarily or involuntarily.

As a part of the financing, the Company also entered into a registration rights agreement with Elliott whereby Elliott can demand that the Company register the shares issuable upon exercise of the warrants, and shares issuable upon conversion of the Series F Stock, if issued.

The backstop agreement (see Warrant section of this Note) provides that until the later of (x) the date that no Series F preferred shares are outstanding and (y) the date the no warrants issued under the backstop agreement are outstanding, the Company may not issue any securities in a "variable rate transaction" other than at-the-market offerings through a registered broker-dealer or offerings of the Series F preferred stock. A "variable rate transaction" is a transaction on terms more favorable than those of the backstop agreement and the Series F preferred stock, in which the Company issues any convertible securities either (A) at a conversion, exercise or exchange rate or other price that is based upon and/or varies with the trading prices of or quotations for the shares of the Company's common Stock at any time after the initial issuance of such convertible securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such convertible securities or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for its common stock, other than pursuant to a customary "weighted average" anti-dilution provision or (ii) enters into any agreement (other than an at-the-market offering through a registered broker-dealer) whereby the Company may sell securities at a future determined price (other than standard and customary "preemptive" or "participation" rights).

The following terms and conditions apply to the Series C, Series D, Series E and Series F non-voting convertible preferred stock outstanding at December 31, 2018 and 2017:

Dividends - Holders of the Series C, Series D and Series E non-voting preferred stock are entitled to receive, and the Company is required to pay, dividends on shares of the Series C, Series D and Series E non-voting preferred stock equal to (on an as-if-converted-to-common-stock basis) and in the same form as dividends (other than dividends in the form of common stock) actually paid on shares of the common stock when, as and if such dividends (other than dividends in the form of common stock) are paid on shares of the common stock.

Fundamental Transactions- If, at any time that shares of Series C, Series D, Series E or Series F non-voting preferred stock are outstanding, the Company effects a merger or other change of control transaction, as described in the certificate of designation and referred to as a fundamental transaction, then, upon each and every fundamental transaction, a holder will have the right to receive, upon any subsequent conversion of a share of Series C, Series D or Series E non-voting preferred stock (in lieu of conversion shares) for each issuable conversion share, the same kind and amount of securities, cash or property as such holder would have been entitled to receive upon the occurrence of such fundamental transaction if such holder had been, immediately prior to such fundamental transaction, the holder of a share of common stock.

Redemption – The Company is not obligated to redeem or repurchase any shares of Series C, Series D, Series E or Series F non-voting preferred stock. Shares of Series C, Series D, Series E and Series F Preferred Stock are not otherwise entitled to any redemption rights.

Listing-There is no established public trading market for the Series C, Series D, Series E or Series F non-voting preferred stock, and the Company does not expect a market to develop. In addition, the Company does not intend to apply for listing of the Series C, Series D, Series E or Series F non-voting preferred stock on any national securities exchange or trading system.

Series C-2 and Series C-3 Non-Voting Convertible Preferred Stock and Warrants

The Series C-2 non-voting preferred stock and Series C-3 non-voting preferred stock have identical rights, privileges and terms and are referred to collectively as the "Series C Stock." Each share of Series C Stock is convertible into 10 shares of common stock at any time at the holder's option at a conversion price of \$1.00 per share. In the event of the Company's liquidation, dissolution, or winding up, holders of the Series C Stock will receive a payment equal to \$10.00 per share of Series C Stock, subject to adjustment, before any proceeds are distributed to the holders of common stock. Shares of the Series C Stock will not be entitled to receive any dividends, unless and until specifically declared by the Company's board of directors.

The Series C Preferred Stock ranks senior to the Company's common stock; senior to any class or series of capital stock created after the issuance of the Series C Preferred Stock (subject to the Company obtaining any consent, waiver or other authorization from the holders of the Series C-3 Convertible Preferred Stock necessary for the subordination of the Series C-3 Convertible Preferred Stock to the Series F Preferred Stock); and junior to the Series D, Series E and Series F non-voting convertible preferred stock. As long as any of the Series C-2 Preferred Stock is outstanding, the Company cannot, without the consent of a majority of the Series C-2 holders, incur any indebtedness other than indebtedness existing prior to September 15, 2014, trade payables incurred in the ordinary course of business consistent with past practice, and letters of credit incurred in an aggregate amount of \$3.0 million at any point in time.

Series D Non-Voting Convertible Preferred Stock

Each share of Series D non-voting convertible preferred stock is convertible into 20 shares of common stock (subject to adjustment) at a per share price of \$0.35 at any time at the option of the holder, except that a holder will be prohibited from converting shares of Series D non-voting convertible preferred stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than 9.99% of the total number of shares of the Company's common stock then issued and outstanding. In the event of the Company's liquidation, dissolution or winding up, holders of Series D non-voting convertible preferred stock will receive a payment equal to \$21.00 per share of Series D non-voting convertible preferred stock on parity with the payment of the liquidation preference due the Series E non-voting convertible preferred stock, but before any proceeds are distributed to the holders of common stock, the Series C-2 non-voting convertible preferred stock.

The Series D non-voting convertible preferred stock ranks senior to the Company's common stock; senior to any class or series of capital stock created after the issuance of the Series D non-voting convertible preferred stock; senior to the Series C-2 non-voting convertible preferred stock and the Series C-3 non-voting convertible preferred stock; on parity with the Series E non-voting convertible preferred stock; and junior to the Series F non-voting convertible preferred stock. As long as any of the Series D non-voting convertible preferred stock is outstanding, the Company cannot, without the consent of a majority of the Series D holders, incur any indebtedness other than indebtedness existing prior to September 15, 2014, trade payables incurred in the ordinary course of business consistent with past practice, and letters of credit incurred in an aggregate amount of \$3.0 million at any point in time.

In addition to the debt restrictions above, as long as any shares of the Series D non-voting convertible preferred stock are outstanding, the Company cannot, among others things: create, incur, assume or suffer to exist any encumbrances on any of its assets or property; or redeem, purchase or otherwise acquire or pay or declare any dividend or other distribution on any junior securities.

Series E Non-Voting Convertible Preferred Stock

Each share of Series E non-voting convertible preferred stock was originally convertible into 21.8667 shares of the Company's common stock (subject to adjustment) at a per share price of \$0.75 at any time at the option of the holder, except that a holder will be prohibited from converting shares of Series E non-voting convertible preferred stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than 9.99% of the total number of shares of the Company's common stock then issued and outstanding. In the event of the Company's liquidation, dissolution or winding up, holders of Series E preferred stock will receive a payment equal to \$49.20 per share of Series E non-voting convertible preferred stock on parity with the payment of the liquidation preference due the Series D non-voting convertible preferred stock, but before any proceeds are distributed to the holders of common stock, the Series C-2 non-voting convertible preferred stock.

The Series E non-voting convertible preferred stock ranks senior to the Company's common stock; senior to any class or series of capital stock created after the issuance of the Series E non-voting preferred stock; senior to the Series C-2 and the Series C-3 non-voting convertible preferred stock; on parity with the Series D non-voting convertible preferred stock; and junior to the Series F non-voting convertible preferred stock. As long as any of the Series E non-voting convertible preferred stock is outstanding, the Company cannot, without the consent of a majority of the Series E holders, incur any indebtedness other than indebtedness existing prior to September 15, 2014, trade payables incurred in the ordinary course of business consistent with past practice, and letters of credit incurred in an aggregate amount of \$3.0 million at any point in time.

In addition to the debt restrictions above, as long as any the Series E non-voting convertible preferred stock is outstanding, the Company cannot, among others things: create, incur, assume or suffer to exist any encumbrances on any of our assets or property; redeem, repurchase or pay any cash dividend or distribution on any of our capital stock (other than as permitted); redeem, repurchase or prepay any indebtedness; or engage in any material line of business substantially different from our current lines of business.

In the event the Company issues any options, convertible securities or rights to purchase stock or other securities pro rata to the holders of common stock, then holders of Series E non-voting convertible preferred stock will be entitled to acquire, upon the same terms a pro rata amount of such stock or securities as if the Series E non-voting convertible preferred stock had been converted to common stock.

Stock Options:

The Company's 2013 Stock Incentive Plan (the "2013 Plan") was approved by the shareholders in July 2013. The 2013 Plan provides for the issuance of equity grants in the form of options, restricted stock, stock awards and other forms of equity compensation. Awards under the 2013 Plan may be made to directors, officers, employees and consultants under the 2013 Plan. Initially, an aggregate of 5,000,000 shares of the Company's common stock was reserved for issuance under the 2013 Plan. On January 19, 2016, the shareholders approved an increase of the shares issuable under the 2013 Plan from 5,000,000 to 8,000,000 and on June 13, 2016 from 8,000,000 to 11,000,000.

During the year ended December 31, 2018, the Company granted ten-year qualified and non-qualified stock options to its officers, directors, employees and consultants covering an aggregate of 678,000 shares of the Company's common stock under the 2013 Stock Incentive Plan. The weighted average exercise price of these options are \$0.44 per share.

During the years ended December 31, 2018 and 2017, total compensation expense for stock options issued to employees, directors, officers and consultants was \$1,018,000 and \$1,571,000, respectively. As of December 31, 2018, there was \$1,619,000 total unrecognized compensation expense related to stock options granted which expense will be recognized over an expected remaining weighted average period of 1.33 years. All share-based awards are recognized on a straight-line method, assuming all awards granted will vest. Forfeitures of share-based awards are recognized in the period in which they occur.

The fair value at grants dates of the grants issued subject to service and performance based vesting conditions were determined using the Black-Scholes option pricing model with the following assumptions:

	Year Ended December 31,		
	2018	2017	
Risk-free interest rate	2.63% - 2.96%	1.77% - 2.40%	
Expected volatility	93% - 103%	95% - 106%	
Expected term (years)	5 years	5 - 10 years	
Expected dividend yield	0.0%	0.0%	
Weighted-average grant date fair value of options granted during the period	\$ 0.32	\$ 1.18	

The Company estimated the expected term of the stock options granted based on anticipated exercises in future periods. The expected term of the stock options granted to consultants is based upon the full term of the respective option agreements. The expected stock price volatility for the Company's stock options is calculated based on the historical volatility since the initial public offering of the Company's common stock in March 2010. The expected dividend yield of 0.0% reflects the Company's current and expected future policy for dividends on the Company's common stock. To determine the risk-free interest rate, the Company utilized the U.S. Treasury yield curve in effect at the time of grant with a term consistent with the expected term of the Company's awards which is 5 years for employees and 10 years for non-employees.

The following table summarizes the Company's stock options activity and related information for the year ended December 31, 2018:

	Shares Underlying Stock Options	Weighted- Average Exercise Price		Average Remaining Contractual Term (Years)	Aggregate trinsic Value
Outstanding at beginning of year	4,962,795	\$	2.04	7.5	\$ 247,500
Granted	678,000	\$	0.44		572,610
Exercised	(40,000)	\$	0.29		42,400
Expired/Cancelled	(90,531)	\$	1.35		21,912
Forfeited	(453,938)	\$	1.89		113,348
Outstanding at end of year	5,056,326	\$	1.86	6.7	\$ 1,006,743
Vested at end of year	3,478,053	\$	1.88	6.1	\$ 639,369
Expected to vest in the future	1,578,273	\$	1.82	8.2	\$ 367,374

The total intrinsic value of stock options exercised during the years ended December 31, 2018 and 2017 was \$42,400 and \$13,200, respectively. The aggregate intrinsic value is calculated as the difference between the exercise prices of the underlying options and the quoted closing price of the common stock of the Company at the end of the reporting period for those options that have an exercise price below the quoted closing price.

Warrants:

The following table is the summary of warrant activities:

	Shares Underlying Warrants	Averaç	eighted ge Exercise Price	Weighted Average Remaining Contractual Life
Outstanding at December 31, 2017	23,417,891	\$	1.08	3.4
Issued	450,000		1.50	5.0
Exercised	(2,442,376)		1.05	-
Expired	(4,830,499)		0.87	-
Outstanding at December 31, 2018	16,595,016	\$	1.10	3.1

On December 31, 2018, the Company sold to Elliott a senior secured convertible note in the aggregate principal amount of \$7,500,000 and a warrant to purchase up to an aggregate of 450,000 shares of common stock, for gross proceeds of \$7,500,000. The warrant is immediately exercisable, has an exercise price of \$1.50 per share, subject to adjustment in the event of stock dividends and distributions, stock splits, stock combinations, or reclassifications affecting the Company's common stock, and has a term of five years (see Note 6). On December 31, 2018, the Company amended and restated the following warrants held by Elliott and its affiliates to reduce the exercise price of each warrant to \$0.001 per share: warrants issued in May 2013 to purchase up to an aggregate of 500,000 shares of the Company's common stock with a pre-amendment exercise price of \$0.65 per share and an expiration date of May 30, 2019 (the "May 30, 2019 Warrants"); and warrants issued in October 2013 to purchase up to an aggregate of 750,000 shares of common stock with a pre-amendment exercise price of \$0.90 per share and an expiration date of October 22, 2019 (the "October 22, 2019 Warrants"). The incremental cost of approximately \$710,000 associated with the warrant modification was recorded as a debt discount.

The fair value of the warrant was determined using a Black-Scholes option pricing model using the following assumptions at the grant date of the warrant:

		nber 31, 018
Expected Term	5	5.0 years
Volatility		102.85%
Dividend yield		0.0%
Exercise Price	\$	1.50
Risk-free interest rate		2.51%

On November 9, 2017, in addition to the securities purchase agreement issued to Elliott (See Note 8 Preferred Stock), the Company entered into a backstop agreement with Elliott to purchase additional Series F convertible preferred Stock at \$1,000 per share, at the Company's sole discretion, beginning January 15, 2018 through March 31, 2018. As consideration for the backstop agreement, the Company issued 564,858 warrants, exercisable for three years, to purchase shares of the Company's common stock at a per share exercise price of \$0.001. The number of shares issuable under the warrant was determined by the closing price of the Company's common stock on November 8, 2017, which was \$0.5278, reduced by the amount of equity capital raised from the ATM program and the sale of common stock to directors, executive officers and other certain employees of the Company totaling \$2.4 million. On November 16, 2017, the Company recorded a derivative liability of \$270,592 and a corresponding reduction to additional paid in capital based on the initial Black Scholes valuation. The warrants were initially classified as a liability as the Company had a conditional obligation to settle the warrants by issuing a variable number of shares with variations of the obligation based on inputs other than the fair value of the Company's shares (i.e. the amount subject to the backstop agreement).

The fair value of the warrants was determined using a Black-Scholes option pricing model using the following assumptions at the grant date of the warrants:

	No	vember 16, 2017
Expected Term		3.0 years
Volatility		98%
Dividend yield		0.0%
Exercise Price	\$	0.00
Risk-free interest rate		1.83%
Fair value of warrants granted	\$	270,592
Number of shares underlying warrants granted		564,858

On December 24, 2017, the derivative liability of \$327,079 was reclassified to equity as the number of issued warrants was determined on that date. Prior to the reclassification to equity, an expense of \$56,487 for the change in fair value of derivative liability was recorded on the Company's consolidated statement of operations and comprehensive income (loss) for the year ended December 31, 2017, which represented the increase in the fair value of the derivative liability from November 16, 2017, the original valuation date of the warrants, and December 24, 2017, the date the warrants became classified as equity.

As these warrants were liability-classified prior to the reclassification to equity, the fair value of the warrants were revalued at December 24, 2017 using the following assumptions:

	_	December 24, 2017
Expected Term		2.90 years
Volatility		98%
Dividend yield		0.0%
Exercise Price	\$	0.00
Risk-free interest rate		2.01%
Weighted average fair value of warrants granted	\$	327,079
Number of shares underlying warrants granted		564,858

In the May 2017 public offering, the Company issued 29,046,110 warrants, of which 9,886,250 warrants were subsequently exchanged for 2,471,561 shares of the Company's common stock during the year ended December 31, 2017.

In the May 2017 public offering, the Company did not have sufficient number of authorized shares of common stock available to reserve the shares issuable upon the exercise of 29,046,110 outstanding warrants issued in the May 2017 public offering. Therefore, these warrants were classified as liabilities at June 30, 2017 and were re-measured on August 10, 2017, which was the Exercisable Date, with any increase or decrease in value recorded as a loss or gain in the income statement. The Company recorded a loss of \$1,974,019 during the year ended December 31, 2017. As of August 9, 2017, the Company had enough authorized shares to cover the issuance of these warrants, and therefore the derivative liability was reclassified to equity on that date in the amount of \$3.854.195.

The fair value of the warrants was determined using a probability-weighted Black-Scholes option pricing under different scenarios regarding the expected probability and timing of sufficient additional shares being authorized to allow the warrants to become exercisable. The following assumptions were used to value the warrants at the grant date.

	Series A	Series B	Underwriter's
Expected Term	1.18 - 1.33 years	5.10 - 5.25 years	5.10 - 5.25 years
Volatility	55%	55%	55%
Dividend yield	0.0%	0.0%	0.0%
Exercise Price	\$0.75	\$1.05	\$0.94
Risk-free interest rate	1.13% - 1.16%	1.86% - 1.88%	1.86% - 1.88%
Weighted average fair value of warrants granted	\$0.08	\$0.17	\$0.18
Number of shares underlying warrants granted	13,964,476	13,964,476	1,117,158

As these warrants are liability-classified, they were revalued at August 10, 2017 using the following assumptions:

	Series A	Series B	Underwriter's
Expected Term	1.09	5.00	5.00
Volatility	96.95%	96.95%	96.95%
Dividend yield	0.0%	0.0%	0.0%
Exercise Price	\$ 0.75	\$ 1.05	\$ 0.94
Risk-free interest rate	1.22%	1.76%	1.76%
Weighted average fair value of warrants	\$ 0.06	\$ 0.20	\$ 0.20

Various warrants that the Company has issued contain a prohibition on the Company entering into a merger, sale of all or substantially all of its assets or similar transaction unless the acquiring entity assumes all of the obligations of the Company under the warrants and also is a publicly traded corporation whose common stock is quoted on or listed for trading on a securities exchange, provided that this prohibition will not apply to an all cash acquisition.

Stock-based Deferred Compensation Plan for Non-Employee Directors

During the third quarter of 2014, the Company established an unfunded stock-based deferred compensation plan, providing non-employee directors the opportunity to defer up to one hundred percent of fees and compensation, including restricted stock units. The amount of fees and compensation deferred by a non-employee director is converted into stock units, the number of which is determined based on the closing price of the Company's common stock on the date such compensation would have otherwise been payable. At all times, the plan participants are one hundred percent vested in their respective deferred compensation accounts. On the tenth business day of January in the year following a director's termination of service, the director will receive a number of common shares equal to the number of stock units accumulated in the director's deferred compensation account. The Company accounts for this plan as stock based compensation under ASC 718. During the year ended December 31, 2018 and 2017, the amount of compensation that was deferred under this plan was \$30,000 and \$57,940, respectively.

Note 9 — Concentrations:

At December 31, 2018, no net accounts receivable was due to a customer that exceeded 10% and for the year ended December 31, 2017, 81% was due from two customers (57% and 24%). During the year ended December 31, 2018, the Company had revenue from a single customer that exceeded 10% of its total sales (70%) and two customers (25% and 19%) for the year ended December 31, 2017.

Note 10 — Subsequent Events:

Through March 8, 2019, the Company issued an aggregate of 8,840,054 shares under its current ATM Program with a weighted average sale price of \$1.78 per share, resulting in net proceeds of approximately \$15.2 million.

Through March 8, 2019, the Company issued an aggregate of 596,100 shares of its common stock upon the exercise of 596,100 warrants with a weighted average exercise price of \$1.04 per share, resulting in net proceeds of approximately \$0.6 million.

On June 26, 2018, the Company's stockholders approved an amendment to the Company's Certificate of Incorporation to effect a reverse stock split at a ratio of between 1-for-5 and 1-for-10, as determined by the Company's Board of Directors, at any time before June 26, 2019, if and as determined by the Board of Directors. On March 12, 2019, the Company's Board of Directors approved a 1-for-5 reverse stock split of its common stock that is scheduled to become effective on March 26, 2019. Upon completion of the reverse stock split, the number of issued and outstanding shares of the Company's common stock will decrease from approximately 109 million to approximately 22 million. The par value of the Company's common stock will remain unchanged at \$0.001 per share after the reverse stock split.

Share and per share data presented in the accompanying consolidated financial statements have not been adjusted for the reverse stock split. Pro forma share and per share data, giving retroactive effect to the reverse stock split, are as follows (rounded to the nearest cent):

	Year Ended December 31,		ber 31,	
		2018		2017
	Pro Forma Amounts Unaudited		Inaudited	
Net Loss Per Common Share – Basic and Diluted:				
Basic and diluted – as reported (pre-stock split)	\$	(0.30)	\$	(0.60)
Basic and diluted – pro forma (post-stock split)		(1.51)		(2.99)
Weighted average shares outstanding:				
Basic and diluted – as reported (pre-stock split)	8	9,083,119		55,141,133
Basic and diluted – pro forma (post-stock split)	1	7,816,624		11,028,227

The consolidated statements of changes in stockholders' equity presented in the accompanying consolidated financial statements have not been adjusted for the reverse stock split. Pro forma stockholders' equity, giving retroactive effect to the reverse stock split, is as follows:

	Year	Year Ended December 31,		
	2018	2017		
	Pro For	ma Amounts Unaudited	ted	
Common stock - \$0.001 par value: 160,000,000 shares authorized:				
Shares issued and outstanding – as reported (pre-stock split)	108,875	5,866 71,413,	,790	
Shares issued and outstanding – pro forma (post-stock split)	21,775	,174 14,282,	,758	
Par value— as reported (pre-stock split)	\$ 108	,876 \$ 71,	,414	
Par value- pro forma (post-stock split)	\$ 21	,775 \$ 14,	,283	
Additional paid-in capital:				
As reported (pre-stock split)	\$ 183,716	5,536 \$ 159,197,	,950	
Pro forma (post-stock split)	\$ 183,803	3,637 \$ 159,255,	,081	

The reverse stock split will also proportionately affect the number of shares of common stock available for issuance under the Company's equity incentive plans and will proportionately reduce the number of shares of common stock issuable upon the exercise of stock options, warrants and preferred stock outstanding immediately prior to the reverse split. The exercise prices of the Company's outstanding options and warrants, and the conversion price of its outstanding preferred stock will be adjusted in accordance with their respective terms.

Exhibit		Registrant's		Exhibit	
Number	Description of Document	Form	Dated	Number	Filed Herewith
<u>1.1</u>	At-the-Market Issuance Sales Agreement, dated March 9, 2018,				
	between CorMedix Inc. and B. Riley FBR, Inc	S-3	3/09/2018	1.1	
<u>3.1</u>	Form of Amended and Restated Certificate of Incorporation.	S-1/A	3/01/2010	3.3	
<u>3.2</u>	Certificate of Amendment to Amended and Restated Certificate of Incorporation, dated February 24, 2010.	S-1/A	3/19/2010	3.5	
3.3	Form of Amended and Restated Bylaws as amended April 19, 2016.	10-Q	5/10/2016	3.1	
<u>3.4</u>	Certificate of Amendment to Amended and Restated Certificate of Incorporation, dated December 3, 2012.	10-K	3/27/2013	3.3	
3.5	Certificate of Amendment to Amended and Restated Certificate of Incorporation, dated August 9, 2017.	8-K	8/10/2017	3.1	
<u>3.6</u>	Certificate of Designation of Series A Non-Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on February 18, 2013, as corrected on February 19, 2013.	8-K	2/19/2013	3.3	
3.7	Certificate of Designation of Series B Non-Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on July 26, 2013.	8-K	7/26/2013	3.4	
3.8	Certificate of Designation of Series C-1 Non-Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on October 21, 2013.	8-K	10/23/2013	3.5	
3.9	Amended and Restated Certificate of Designation of Series C-2 Non- Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.15	
3.10	Amended and Restated Certificate of Designation of Series C-3 Non-Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.16	
3.11	Amended and Restated Certificate of Designation of Series D Non- Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.17	
	E-1				

Exhibit		Registrant's		Exhibit	
Number	Description of Document	Form	Dated	Number	Filed Herewith
<u>3.12</u>	Amended and Restated Certificate of Designation of Series E Non-				
	Voting Convertible Preferred Stock of CorMedix Inc., filed with the	- 14			
0.40	Delaware Secretary of State on September 15, 2014.	8-K	9/16/2014	3.18	
<u>3.13</u>	Amended and Restated Certificate of Designation of Series F Non-				
	Voting Convertible Preferred Stock of CorMedix Inc., filed with the Delaware Secretary of State on December 11, 2017.	8-K	12/11/2017	3.1	
<u>4.1</u>	Specimen of Common Stock Certificate.	S-1/A	3/19/2010	4.1	
4.2	•	8-K		4.13	
	Form of Warrant issued on February 19, 2013. Form of Second Amended Restated Warrant originally issued on	0-1\	2/19/2013	4.13	
<u>4.3</u>	October 22, 2013.	8-K	1/3/2019	4.2	
4.4	Form of Warrant issued on January 8, 2014.	8-K	1/09/2014	4.23	
<u>4.5</u>	Form of Warrant issued on March 10, 2014.	8-K	03/05/2014	4.24	
4.6	Warrant issued March 3, 2015.	8-K	03/04/2015	4.1	
4.7	Amended and Restated Warrant originally issued March 24, 2010.	8-K	03/04/2015	4.3	
4.8	Third Amended and Restated Warrant originally issued May 30, 2013.	8-K	01/03/2019	4.3	
<u>4.9</u>	Third Amended and nestated warrant originally issued May 30, 2013.	0-10	01/03/2019	7.0	
4.0	Registration Rights Agreement, dated March 3, 2015, by and between				
	CorMedix Inc. and Manchester Securities Corp.	8-K	03/04/2015	4.5	
<u>4.10</u>					
	Form of Series B Warrant to Purchase Common Stock of CorMedix Inc.				
	issued on May 3, 2017.	8-K	05/03/2017	4.2	
<u>4.11</u>	Form of Underwriter's Warrant to Purchase Common Stock of CorMedix	0.14			
1.10	Inc., issued May 3, 2017.	8-K	05/03/2017	4.3	
<u>4.12</u>	Form of Warrant issued on November 16, 2017.	8-K	11/13/2017	4.15	
4.13	Form of Warrant issued on December 31, 2018	8-K	1/03/2019	4.1	
4.14	Senior Secured Convertible Note issued December 31, 2018.	8-K	1/03/2019	4.4	
<u>10.1</u> *	License and Assignment Agreement, dated as of January 30, 2008, between the Company and ND Partners LLC.	S-1/A	12/31/2009	10.5	
10.2	Escrow Agreement, dated as of January 30, 2008, among the	0 1//(12/31/2009	10.0	
<u></u>	Company, ND Partners LLC and the Secretary of the Company, as				
	Escrow Agent.	S-1	11/25/2009	10.6	
	-				
	E-2				

Description of Document Form Dated Number Filed Herewith	Exhibit		Registrant's		Exhibit	
Company and Frank Prosl. S-1 11/25/2009 10.12	Number	Description of Document	Form	Dated	Number	Filed Herewith
10.4	10.3	Consulting Agreement, dated as of January 30, 2008, between the				
10.5 Form of Indemnification Agreement between the Company and each of its directors and executive officers. S-1/A 3/01/2010 10.17		Company and Frank Prosl.	S-1	11/25/2009	10.12	
its directors and executive officers. S-1/A 3/01/2010 10.17 10.6 2013 Stock Incentive Plan 10-K 3/27/2013 10.27 10.7 Preliminary Services Agreement dated April 8, 2015, between CorMedix Inc. and [RC]2 Pharma Connect LLC. 10-Q 8/06/2015 10.1 10.8 Release of Claims and Severance Modification, dated July 17, 2015, between Randy Milby and CorMedix Inc. 10-K 3/15/2016 10.16 10.9* Employment Agreement, dated as of September 27, 2016 and effective as of October 3, 2016, between CorMedix, Inc. and Khoso Baluch Inc. and Robert Cook. 10-K 3/16/2017 10.12 10.10* Employment Agreement, effective February 1, 2017, between CorMedix Inc. and John Armstrong. 10-K 3/16/2017 10.12 10.11 Employment Agreement, effective March 1, 2017, between CorMedix Inc. and John Armstrong. 10-K 3/16/2017 10.14 10.12 Form of Securities Purchase Agreement, dated November 17, 2017, between CorMedix Inc. and the investor signatory thereto. 8-K 11/13/2017 10.1 10.13 Backstop Agreement, dated November 9, 2017, between CorMedix Inc. and the investor named therein. 8-K 11/13/2017 10.2 10.14 Form of Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 8-K 11/13/2017 10.3 10.15 Amendment No. 1, dated as of December 11, 2017, to Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 8-K 12/11/2017 10.1 10.16 Employment Agreement, effective March 19, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1	<u>10.4</u>	Amended and Restated 2006 Stock Incentive Plan.	S-1/A	3/01/2010	10.8	
10.6	<u>10.5</u>	Form of Indemnification Agreement between the Company and each of				
10.7 Preliminary Services Agreement dated April 8, 2015, between CorMedix Inc. and [RC]2 Pharma Connect LLC. 10.8 Release of Claims and Severance Modification, dated July 17, 2015, between Randy Milby and CorMedix Inc. 10.9 Employment Agreement, dated as of September 27, 2016 and effective as of October 3, 2016, between CorMedix, Inc. and Khoso Baluch 10.10 Employment Agreement, effective February 1, 2017, between CorMedix Inc. and Robert Cook. 10.11 Employment Agreement, effective March 1, 2017, between CorMedix Inc. and John Armstrong. 10.12 Form of Securities Purchase Agreement, dated November 17, 2017, between CorMedix Inc. and John Armstrong. 10.13 Backstop Agreement, dated November 9, 2017, between CorMedix Inc. and the investor named therein. 10.14 Form of Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 10.15 Amendment No. 1, dated as of December 11, 2017, to Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 10.15 Employment Agreement, effective March 19, 2018, between CorMedix Inc. and the investor named therein. 10.16 Employment Agreement, effective March 19, 2018, between CorMedix Inc. and Elizabeth Masson 10.17 Securities Purchase Agreement, dated December 31, 2018, between		its directors and executive officers.	S-1/A	3/01/2010	10.17	
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Inc. and Robert Cook. 10-K 3/16/2017 10.12 10.11 Employment Agreement, effective March 1, 2017, between CorMedix Inc. and John Armstrong. 10-K 3/16/2017 10.14 10.12 Form of Securities Purchase Agreement, dated November 17, 2017, between CorMedix Inc. and the investors signatory thereto. 10.13 Backstop Agreement, dated November 9, 2017, between CorMedix Inc. and the investor named therein. 10.14 Form of Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 10.15 Amendment No. 1, dated as of December 11, 2017, to Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 10.16 Employment Agreement, effective March 19, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1	10.10*		0-10	10/03/2016	10.1	
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Amendment No. 1, dated as of December 11, 2017, to Registration Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 8-K 12/11/2017 10.1 10.16* Employment Agreement, effective March 19, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between	<u>10.14</u>		- 1.			
Rights Agreement, dated November 9, 2017, by and between CorMedix Inc. and the investor named therein. 10.16* Employment Agreement, effective March 19, 2018, between CorMedix Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between			8-K	11/13/2017	10.3	
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Inc. and Elizabeth Masson 10-Q 5/15/2018 10.1 10.17 Securities Purchase Agreement, dated December 31, 2018, between	10.16*		0-1/	12/11/2017	10.1	
10.17 Securities Purchase Agreement, dated December 31, 2018, between	10.16		10-0	5/15/2019	10.1	
	10 17		10 0	3/13/2010	10.1	
	10.17		8-K	1/03/2019	10.1	
				.,		

Exhibit		Registrant's		Exhibit	
Number	Description of Document	Form	Dated	Number	Filed Herewith
<u>21.1</u>	List of Subsidiaries	10-K	3/27/2013	21.1	
23.1	Consent of Independent Registered Public Accounting Firm.				Χ
31.1	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				X
31.2	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				Х
32.1	Certification of Principal Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				Х
32.2	Certification of Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				Х
101	The following materials from CorMedix Inc. Form 10-K for the year ended December 31, 2018, formatted in Extensible Business Reporting Language (XBRL): (i) Balance Sheets at December 31, 2018 and 2017, (ii) Statements of Operations for the years ended December 31, 2018 and 2017, (iii) Statements of Changes in Stockholders' Equity for the years ended December 31, 2018 and 2017, (iv) Statements of Cash Flows for the years ended December 31, 2018 and 2017 and (v) Notes				
	to the Financial Statements.**				X

^{*} Confidential treatment has been granted for portions of this document. The omitted portions of this document have been filed separately with the SEC.

Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files in 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 Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (File Nos. 333-170498, 333-192840, and 333-212430) and on Form S-3 (File Nos. 333-211695, 333-223562 and 333-227846) of CorMedix, Inc. and subsidiary (the "Company") of our report dated March 14, 2019, on our audits of the consolidated financial statements as of December 31, 2018 and 2017, and for each of the years in the two-year period ended December 31, 2018 which appear in this Form 10-K.

/s/ Friedman LLP March 14, 2019 East Hanover, New Jersey

CERTIFICATION OF THE PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Khoso Baluch, certify that:

- 1. I have reviewed this annual report on Form 10-K of CorMedix Inc. for the year ended December 31, 2018;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.
 - (c) Any incidents of cybersecurity that have a significant impact on internal controls over financial reporting and financial statements.

March 14, 2019 /s/ Khoso Baluch

Name: Khoso Baluch

Title: Chief Executive Officer (Principal Executive

Officer)

CERTIFICATION OF THE PRINCIPAL FINANCIAL OFFICER

PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Robert Cook, certify that:

- 1. I have reviewed this annual report on Form 10-K of CorMedix Inc. for the year ended December 31, 2018;
- Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles:
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Name: Robert Cook

(c) Any incidents of cybersecurity that have a significant impact on internal controls over financial reporting and financial statements.

March 14, 2019 /s/ Robert Cook

Title: Chief Financial Officer (Principal Financial Officer)

CERTIFICATION OF THE PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of CorMedix Inc. (the "Company") on Form 10-K for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Khoso Baluch, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 14, 2019 /s/ Khoso Baluch

Name: Khoso Baluch

Title: Chief Executive Officer (Principal Executive

Officer)

CERTIFICATION OF THE PRINCIPAL FINANCIAL OFFICER

PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the annual report of CorMedix Inc. (the "Company") on Form 10-K for the year ended December 31, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Robert Cook, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

March 14, 2019 /s/ Robert Cook

Name: Robert Cook

Title: Chief Financial Officer (Principal Financial Officer)