UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

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

For the Fiscal Year Ended December 31, 2016
or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Transition Period from _____ to _____.

Commission File No. 001-35366

FORTRESS BIOTECH, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**20-5157386**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**
2 Gansevoort Street, 9th Floor **New York, New York 10014**	**10014**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant's telephone number, including area code: (781) 652-4500

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

(Title of Class)	**(Name of exchange on which registered)**
Common Stock, par value $0.001 per share	**NASDAQ Capital Market**

Securities registered pursuant to section 12(g) of the Act: None.

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter: $78,431,868 based upon the closing sale price of our common stock of $2.69 on that date. Common stock held by each officer and director and by each person known to own in excess of 5% of outstanding shares of our common stock has been excluded in that such persons may be deemed to be affiliates. The determination of affiliate status in not necessarily a conclusive determination for other purposes.

As of March 15, 2017, there were 50,319,919 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2017 Annual Meeting of Stockholders currently scheduled to be held on June 15, 2017 are incorporated by reference into Part III hereof.

FORTRESS BIOTECH, INC.
ANNUAL REPORT ON FORM 10-K
TABLE OF CONTENTS

CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

Statements in this Annual Report on Form 10-K that are not descriptions of historical facts are forward-looking statements that are based on management's current expectations and are subject to risks and uncertainties that could negatively affect our business, operating results, financial condition and stock price. We have attempted to identify forward-looking statements by terminology including "anticipates," "believes," "can," "continue," "could," "estimates," "expects," "intends," "may," "might," "plans," "potential," "predicts," "should," or "will" or the negative of these terms or other comparable terminology. Factors that could cause actual results to differ materially from those currently anticipated include those set forth under "Item 1A. Risk Factors" including, in particular, risks relating to:

- our growth strategy;
- financing and strategic agreements and relationships;
- our need for substantial additional funds and uncertainties relating to financings;
- our ability to identify, acquire, close and integrate product candidates successfully and on a timely basis;
- our ability to attract, integrate and retain key personnel;
- the early stage of products under development;
- the results of research and development activities;
- uncertainties relating to preclinical and clinical testing;
- the ability to secure and maintain third-party manufacturing, marketing and distribution of our and our subsidiaries' products;
- government regulation;
- patent and intellectual property matters;
- dependence on third-party manufacturers; and
- competition.

We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations or any changes in events, conditions or circumstances on which any such statement is based, except as required by law.

PART I

Item 1. Business.

Overview

Fortress Biotech, Inc. ("Fortress" or the "Company") is a biopharmaceutical company dedicated to acquiring, developing and commercializing novel pharmaceutical and biotechnology products. Fortress was incorporated in the state of Delaware on June 28, 2006. Fortress develops and commercializes products both within Fortress and through certain of our subsidiary companies, also referred to herein as the "Fortress Companies." Additionally, the Company recently acquired a controlling interest in National Holdings Corporation, a diversified independent brokerage company (together with its subsidiaries, herein referred to as "NHLD" or "National"). In addition to its internal development programs, the Company leverages its biopharmaceutical business expertise and drug development capabilities and provides funding and management services to help the Fortress Companies achieve their goals. The Company and the Fortress Companies may seek licensings, acquisitions, partnerships, joint ventures and/or public and private financings to accelerate and provide additional funding to support their research and development programs.

Business Strategy

Our business approach is designed for maximum flexibility, allowing us to invest in a broad array of new technologies with clinical and commercial potential. It enables us to move quickly to take advantage of time-sensitive opportunities when necessary, and provides us with a range of options that allow us to select what we believe is the most advantageous corporate or financial structure for each drug candidate. We seek to acquire and invest in drugs, technologies and operating subsidiaries with high growth potential. In 2016, we made significant progress with our above initiatives and believe our novel business approach will provide opportunities to achieve synergies across multiple Fortress Companies.

At the end of 2016, in addition to National, we had several consolidated Fortress Companies, some of which contain product licenses, including Avenue Therapeutics, Inc. ("Avenue"), Cellvation, Inc. ("Cellvation"), Checkpoint Therapeutics, Inc. ("Checkpoint"), Coronado SO Co. ("Coronado SO"), Helocyte, Inc. (formerly known as DiaVax Biosciences, Inc., "Helocyte"), Journey Medical Corporation ("Journey" or "JMC"), Mustang Bio, Inc. (formerly known as Mustang Therapeutics, Inc., "Mustang"), Escala Therapeutics, Inc. (formerly known as Altamira Biosciences, Inc., "Escala"), and CB Securities Corporation. Caelum Biosciences, Inc. ("Caelum") and Cyprium Therapeutics, Inc., both consolidated Fortress Companies that also hold product licenses, were formed in January 2017 and March 2017, respectively.

The Fortress Companies

Avenue Therapeutics, Inc.

Avenue was formed as a specialty pharmaceutical company to acquire, license, develop and commercialize products principally for use in the acute/intensive care hospital setting. Avenue's lead product candidate is an intravenous ("IV") formulation of tramadol HCl ("IV Tramadol") for the treatment of moderate to moderately severe post-operative pain. In February 2015, we purchased the exclusive license to IV Tramadol for the U.S. market from Revogenex Ireland Limited ("Revogenex") and transferred it to Avenue. In December 2016, Avenue received Notices of Allowance from the U.S. Patent and Trademark Office ("USPTO") for two continuation patent applications covering methods of administration for IV Tramadol; issuance of both patents occurred in February 2017. Avenue also completed an End-of-Phase 2 (EOP) meeting with the U.S. Food and Drug Administration (the "FDA") regarding IV Tramadol. Avenue anticipates initiation of the Phase 3 study for IV Tramadol in 2017. Avenue filed a Form 10 registration statement with the SEC on January 12, 2017. Avenue is a Delaware corporation and a majority-owned subsidiary of Fortress.

Caelum Biosciences, Inc.

Caelum is a clinical stage biotechnology company developing treatments for rare and life-threatening conditions. Caelum's lead asset, CAEL-101, is a novel antibody in Phase 1b clinical trials that was licensed from Columbia University in January 2017 and is being developed for patients with AL Amyloidosis. Interim Phase 1a/1b data on CAEL-101 was presented at the American Society of Hematology meeting in December 2016. Caelum is a Delaware corporation and a majority-owned subsidiary of Fortress.

Cellvation, Inc.

Cellvation is a clinical-stage biopharmaceutical company developing novel therapeutics for the treatment of traumatic brain injury ("TBI"). The company is currently advancing clinical-stage cell therapies for the treatment of severe TBI including: a Phase 2 study of CEVA101 in pediatric patients (ClinicalTrials.gov Identifier: NCT01851083) and a Phase 2 study of CEVA101 in adults (ClinicalTrials.gov Identifier: NCT02525432). The Phase 2 studies are supported by grants in excess of $10 million from the National Institutes of Health and the Department of Defense. Cellvation is also developing CEVA-D, a novel bioreactor that enhances the anti-inflammatory potency of bone marrow-derived cells without genetic manipulation. TBI is a leading cause of death and disability

among adults and children in the United States. Based on the National Hospital Discharge Survey, there were approximately 2.5 million TBIs in the United States in 2010. There is no approved therapy for the treatment of TBI. The Cellvation therapeutics may reduce the inflammation and secondary injury associated with TBI, representing a novel approach to a condition with significant unmet medical need. Cellvation is a Delaware corporation and a majority-owned subsidiary of Fortress.

Checkpoint Therapeutics, Inc.

Checkpoint is an immuno-oncology biopharmaceutical company focused on the acquisition, development and commercialization of novel, non-chemotherapy, immune-enhanced combination treatments for patients with solid tumor cancers. Checkpoint aims to acquire rights to these technologies by licensing the rights or otherwise acquiring an ownership interest in the technologies, funding their research and development and eventually either out-licensing or bringing the technologies to market. Checkpoint is currently developing a portfolio of fully human immuno-oncology targeted antibodies generated in the laboratory of Dr. Wayne Marasco, M.D., Ph.D., a professor in the Department of Cancer Immunology and AIDS at the Dana-Farber Cancer Institute ("Dana-Farber"). The portfolio of antibodies licensed from Dana-Farber includes antibodies targeting programmed death-ligand 1 ("PD-L1"), glucocorticoid-induced TNFR related protein ("GITR") and carbonic anhydrase IX ("CAIX") (together, the "Dana-Farber Antibodies"). Checkpoint plans to develop these novel immuno-oncology and checkpoint inhibitor antibodies on their own and in combination with each other, as published literature suggests that combinations of these targets may work synergistically. Checkpoint expects to submit investigational new drug ("IND") applications for its anti-PD-L1 antibody in 2017 and its anti-GITR and anti-CAIX antibodies in 2018. Checkpoint has also licensed and is developing three oral targeted anti-cancer therapies consisting of an inhibitor of epidermal growth factor receptor ("EGFR") mutations, an inhibitor of the bromodomain and extra-terminal ("BET") protein, BRD4, and an inhibitor of poly (ADP-ribose) polymerase ("PARP"). Checkpoint submitted an IND application to the FDA for its EGFR inhibitor, which was accepted in August 2016, and the company began a Phase 1/2 clinical trial in September 2016. Checkpoint plans to submit an IND application for its BET inhibitor in 2017 and is currently developing a clinical program for its PARP inhibitor, which is expected to commence in the next 12 months. Checkpoint will additionally seek to add additional immuno-oncology drugs as well as other targeted therapies to create wholly-owned proprietary combinations that leverage the immune system and other complementary mechanisms. Checkpoint is a Delaware corporation and a majority-controlled subsidiary of Fortress.

Coronado SO Co.

Coronado SO was formed in March 2014 as an oncology subsidiary. In January 2015, Coronado SO entered into an exclusive license agreement with a third party for a license for a Phase 2, Uracil Topical Cream used in the treatment and prevention of hand-foot syndrome, a common painful side effect of chemotherapeutics. In June 2015, the U.S. FDA accepted specific components of a planned Phase 2 study. Coronado SO is a Delaware corporation and is a majority-owned subsidiary of Fortress.

Cyprium Therapeutics, Inc.

Cyprium was formed in March 2017 to develop novel therapies for the treatment of Menkes disease and related copper metabolism disorders. In March 2017, Cyprium and the Eunice Kennedy Shriver National Institute of Child Health and Human Development ("NICHD"), part of the National Institutes of Health ("NIH"), executed a Cooperative Research and Development Agreement ("CRADA") to advance the clinical development of Phase 3 candidate CUTX-101 (copper histidinate injection) for the treatment of Menkes disease. Cyprium and NICHD also entered into a worldwide, exclusive license agreement to develop and commercialize AAV-based ATP7A gene therapy for use in combination with CUTX-101 for the treatment of Menkes disease and related copper transport disorders. Cyprium is a Delaware corporation and a majority-owned subsidiary of Fortress.

Escala Therapeutics, Inc.

Escala is a biopharmaceutical company focused on the acquisition, development and commercialization of novel agents for the treatment of rare, neglected or orphan disorders. Escala is currently developing N-acetyl-D-mannosamine monohydrate ("ManNAc"), for the treatment of GNE Myopathy (also known as Human Inclusion Body Myopathy, or HIBM), and other disorders, in partnership with the NIH. In July 2015, Escala acquired the NIH's license and cooperative research and development agreements from New Zealand Pharmaceuticals Limited ("NZP"). NZP will continue to manufacture ManNAc and remain the exclusive global supplier of ManNAc to Escala. ManNAc is currently under investigation in an open label Phase 2 clinical study for the treatment of GNE Myopathy. A Phase 1 study to further investigate ManNAc safety and tolerability in a range of kidney disorders (glomerular nephropathies) associated with hyposialylation is ongoing. Escala is a Delaware corporation and a majority-owned subsidiary of Fortress.

Helocyte, Inc.

Helocyte is a clinical-stage biopharmaceutical company developing novel immunotherapies for the prevention and treatment of cancer and infectious disease (and in particular, cytomegalovirus or "CMV"), a common virus that affects people of all ages. The Centers for

Disease Control estimate that 50% to 80% of Americans are infected with CMV by the age of 40. While the virus is asymptomatic in healthy individuals, it can cause severe and life-threatening disease in those with weakened or uneducated immune systems. Patients undergoing allogenic stem cell and solid organ transplantation are at particularly high risk of experiencing complications associated with CMV. Helocyte's PepVax and Triplex vaccines are engineered to induce a robust and durable virus-specific T cell response to control CMV in transplant recipients. Triplex and PepVax are currently being investigated in multicenter Phase 2 studies for CMV control in stem cell transplant recipients. Helocyte's Pentamer vaccine is designed to induce a neutralizing antibody response to prevent the transmission of CMV from mother to fetus, the most common congenital infection. There is no approved therapy for the prevention or treatment of congenital CMV. While current antiviral therapies have reduced the rate of CMV disease-related mortality in transplant recipients, such treatments have been linked to increased toxicity, delayed immune reconstitution and late onset of CMV. The Helocyte vaccines can educate the body's innate immune system to fight CMV. Helocyte is a Delaware corporation and a majority-owned subsidiary of Fortress.

Journey Medical Corporation

Journey was formed in October of 2014 as an innovative company focused on developing, acquiring, licensing and commercializing branded dermatology products. Journey launched four products in 12 months, beginning in October 2015. Three of those products are under the Journey name, and one is a co-promote agreement. Most recently, Journey launched Targadox™, a 50 mg immediate-release doxycycline hyclate coated tablet. Targadox is indicated as adjunctive therapy for severe acne. In 2016, Journey launched Luxamend® Wound Cream and CeracadeTM Skin Emulsion. Journey also has an agreement to co-promote Dermasorb HC for Crown Labs. Journey is a Delaware corporation and a majority-owned subsidiary of Fortress.

Mustang Bio, Inc.

Mustang is developing novel immunotherapies based on the Chimeric Antigen Receptor T-cell ("CAR-T") research of Dr. Stephen Forman and Dr. Christine Browne of City of Hope ("COH"), an NCI-designated Comprehensive Cancer Center. Mustang was formed to help bring this CAR research to as many patients as possible. Mustang, through a research agreement with COH, is developing CARs across multiple cancers, with the initial focus on acute myeloid leukemia and brain cancer. Both of the lead programs are in Phase 1 clinical studies. Mustang believes that harnessing the body's own immune system to treat cancer is the next generation of cancer therapies that may prove curative across tumor types that have proved resilient to standard pharmacological and biological treatments. A patient case study from the Phase 1 clinical trial of MB-101, a lead development candidate of Mustang for the treatment of glioblastoma, was recently published in the December 29 edition of *The New England Journal of Medicine*. Mustang is a Delaware corporation and a majority-controlled subsidiary of Fortress.

In a private placement offering that concluded on January 31, 2017, Mustang raised aggregate gross proceeds of $94.5 million, including $39.1 million that was collected during the year ended December 31, 2016. In connection with the offering, Mustang paid its placement agent, OPN Capital Markets ("OPN"), the healthcare-related investment banking and research division of National Securities Corporation, $9.5 million or 10%, of which $3.9 million was paid in 2016. Mustang also issued to OPN approximately 1.5 million warrants to purchase Mustang's common stock, of which 0.6 million warrants were issued in 2016.

National Holdings Corporation

On September 9, 2016, the Company, purchased approximately 56.6% of NHLD's common stock, par value $0.02 per share, at the purchase price of $3.25 per share in cash for a total purchase price of approximately $22.9 million.

National, a Delaware corporation organized in 1996, operates through its wholly-owned subsidiaries which principally provide financial services. Through its broker-dealer, investment advisory and other subsidiaries, it (1) offers full service retail brokerage and wealth management services to high net worth individual and institutional clients, (2) provides investment banking, merger and acquisition and advisory services to micro, small and mid-cap high growth companies, (3) engages in trading securities, including making markets in micro and small-cap NASDAQ and other exchange listed stocks, (4) provides liquidity in the United States Treasury marketplace and (5) to a lesser extent, provides tax preparation, fixed insurance sales and licensed mortgage brokerage services.

Product Candidates held by Fortress

In July 2016, Fortress entered into a License Agreement with GeneMedicine, Inc. ("GeneMedicine") to develop products using Gene Medicine's oncolytic adenovirus technology. In connection with the license agreement, Fortress agreed to provide GeneMedicine $0.3 million in funding for an 18-month research study in connection with the technology. In October 2016, Fortress paid a fee of $0.1 million to GeneMedicine to initiate the research program.

In September 2016, Fortress entered into a Development and License Agreement with Effcon Laboratories, Inc. ("Effcon") for the extended release formulation of methazolamide. Fortress made an upfront payment to Effcon of $0.2 million. Seven additional milestone payments totaling up to $5.3 million may become payable upon the achievement of certain developmental and sales milestones. Fortress agreed to fund a related development budget of up to $1.6 million.

Fortress continues to develop CNDO-109, a lysate (disrupted CTV-1 cells, cell membrane fragments, cell proteins and other cellular components) that activates donor Natural Killer ("NK") cells. CTV-1 is a leukemic cell line re-classified as a T-cell acute lymphocytic leukemia ("ALL"). In November 2007, we entered into a license agreement, since amended, with University College London Business PLC ("UCLB") under which we received an exclusive, worldwide license to develop and commercialize CNDO-109 to activate NK cells for the treatment of cancer-related and other conditions and a non-exclusive license to certain clinical data solely for use in the IND for CNDO-109. In consideration of the license from UCLB, we will be required to make future milestone payments totaling up to approximately $22.0 million contingent upon the achievement of various regulatory milestones and, in the event that CNDO-109 is commercialized, we may be obligated to pay to UCLB royalties ranging from 3% to 5% of net sales of the product or, if commercialized by a sublicensee, a percentage of certain consideration we receive from such sublicensee (ranging from 20%-30% of such consideration depending on the stage of clinical development at the time of the sublicense). The manufacturing process for CNDO-109 activated NK cells is currently under development. We have produced a master cell bank and a working cell bank of CTV-1 cells in collaboration with BioReliance Corp, and we have contracted with Progenitor Cell Therapy, LLC and WuXi AppTec for services related to development, manufacture and testing services. We have sponsored a Phase 1/2 study in patients with AML who were in their first complete remission ("CR1") and who were at a high risk of relapsing. This study has completed enrollment but is remaining open to follow the long-term relapse-free survival status of patients.

Intellectual Property

Our goal is to obtain, maintain and enforce patent protection for our and, in some cases, our subsidiaries' product candidates, formulations, processes, methods and any other proprietary technologies, preserve our trade secrets, and operate without infringing on the proprietary rights of other parties, both in the United States and in other countries. Our policy is to actively seek to obtain, where

appropriate, the broadest intellectual property protection possible for our and, in some cases, our subsidiaries' product candidates, proprietary information and proprietary technology through a combination of contractual arrangements and patents, both in the United States and abroad. However, patent protection may not afford us with complete protection against competitors who seek to circumvent our patents.

We also depend upon the skills, knowledge, experience and know-how of our and our subsidiaries' management and research and development personnel, as well as that of our advisers, consultants and other contractors. To help protect our proprietary know-how, which is not patentable, and for inventions for which patents may be difficult to enforce, we and our subsidiaries currently rely and will in the future rely on trade secret protection and confidentiality agreements to protect our interests. To this end, we and our subsidiaries require all of our employees, consultants, advisers and other contractors to enter into confidentiality agreements that prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

Under the GeneMedicine license, we have an exclusive, worldwide license under three patent families assigned to GeneMedicine to develop and commercialize certain compositions of matter directed to (i) recombinant vectors comprising a transcriptional regulatory sequence operably linked to a therapeutic transgene, such as tumor suppressor gene, cytotoxic gene, anti-angiogenic gene and the like; (ii) methods of co-expression of IL-12 and IL-23; and (iii) a method of enhancing transduction efficiency of a recombinant adenovirus expression vector into a tumor cell in a solid tumor. The foregoing three patent families include counterparts in Europe and selected Asian jurisdictions, scheduled to expire in 2024, 2028 and 2026, respectively. The granted U.S. counterparts of the first two patent families enjoy patent term adjustments, which extend the terms of these patents out to 2027 and 2030, respectively, without taking into account any further potential extensions under patent term restoration provisions of U.S. patent laws.

With respect to CNDO-109, we have exclusive rights to International Patent Application No. PCT/GB2006/000960 and all pending United States and foreign counterpart applications including granted U.S. Patents No. 8,257,970 and 8,637,308 and the corresponding national phase applications granted in Australia and India and filed in Canada, Europe and Japan, directed to the stimulation of NK cells and related CNDO-109 compositions and methods including methods for the treatment of cancer and other conditions. This patent family has been in-licensed on an exclusive basis from UCLB. The CNDO-109 patent has an expiration date of January 2029 in the absence of any patent term extension. By way of an amendment to the license agreement with UCLB, we also have exclusive rights to International Application No. PCT/GB2010/051135 and all pending United States and foreign counterpart applications including pending United States Patent Application Serial No. 12/833,694 and the corresponding national phase applications filed in Europe, Brazil, China, Israel, Singapore and South Africa, directed to the preservation of activated NK cells and related compositions and methods. The CNDO-109 patents that may issue from the former patent family would expire in July 2030 in the absence of any patent term extension. The amendment includes rights to certain additional confidential technologies as well.

National owns the following federally registered marks: vFinance, Inc.®, vFinance.com, Inc. ®, AngelSearch® and Gilman Ciocia®.

Competition - ***Fortress***

We and our subsidiaries operate in highly competitive segments of the biotechnology and biopharmaceutical markets. We face competition from many different sources, including commercial pharmaceutical and biotechnology enterprises, academic institutions, government agencies, and private and public research institutions. Many of our and our subsidiaries' competitors have significantly greater financial, product development, manufacturing and marketing resources than us. Large pharmaceutical companies have extensive experience in clinical testing and obtaining regulatory approval for drugs. In addition, many universities and private and public research institutes are active in cancer research, some in direct competition with us and our subsidiaries. We and our subsidiaries also may compete with these organizations to recruit scientists and clinical development personnel. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

Each cancer indication for which we or any of our subsidiaries may develop products has a number of established therapies with which our candidates will compete. With respect to CNDO-109, most major pharmaceutical companies and many biotechnology companies are aggressively pursuing new cancer development programs, including both therapies with traditional, as well as novel, mechanisms of action. Some of the anticipated competitor treatments for AML include Genzyme Corporation's Clolar (clofarabine), currently approved as a treatment for ALL, Eisai Corporation's Dacogen (decitabine), currently approved as a treatment for Myelodysplastic Syndromes ("MDS"), Celgene Corporation's Vidaza (azacitidine), currently approved as treatments for MDS, and Sunesis Pharmaceuticals, Inc.'s vosaroxin and Ambit Bioscience, Inc.'s quizartinib, which are currently being developed as a treatment for AML, any or all of which could change the treatment paradigm of acute leukemia. Each of these compounds is further along in clinical development than is the CDNO-109 activated NK cell product.

Competition - *National*

National is engaged in a highly competitive business. With respect to one or more aspects of its business, National's competitors include member organizations of the New York Stock Exchange and other registered securities exchanges in the United States and Canada, the U.K., Europe and members of FINRA. Many of these organizations have substantially greater personnel and financial resources and more sales offices than National. Discount brokerage firms affiliated with commercial banks provide additional competition, as well as companies that provide electronic on-line trading. In many instances, National is also competing directly for customer funds with investment opportunities offered by real estate, insurance, banking, and savings and loans industries.

The securities industry has become considerably more concentrated and more competitive since National was founded, as numerous securities firms have either ceased operations or have been acquired by or merged into other firms. In addition, companies not engaged primarily in the securities business, but with substantial financial resources, have acquired leading securities firms. These developments have increased competition from firms with greater capital resources than those of National.

Since the adoption of the Gramm-Leach-Bliley Act of 1999, commercial banks and thrift institutions have been able to engage in traditional brokerage and investment banking services, thus increasing competition in the securities industry and potentially increasing the rate of consolidation in the securities industry.

National also competes with other securities firms for successful sales representatives, securities traders and investment bankers. Competition for qualified employees and independent contractors in the financial services industry is intense. National's continued ability to compete effectively depends on its ability to attract new employees and independent contractors and to retain and motivate its existing employees and independent contractors.

In addition, National's tax preparation business is also subject to extensive competition. National competes with national tax return preparers such as H&R Block, Jackson Hewitt, and Liberty Tax, among others. The remainder of the tax preparation industry is highly fragmented and includes regional tax preparation services, accountants, attorneys, small independently owned companies, and financial service institutions that prepare tax returns as ancillary parts of their business. To a much lesser extent, National competes with the on-line and software self-preparer market.

Government Regulation and Product Approval - Fortress

Government authorities in the United States, at the federal, state and local level, and other countries extensively regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of products such as those we and our subsidiaries are developing.

United States Pharmaceutical Product Development Process

In the United States, the FDA regulates pharmaceutical (drug and biologic) products under the Federal Food, Drug and Cosmetic Act, and implementing regulations. Pharmaceutical products are also subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product-development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a pharmaceutical product may be marketed in the United States generally includes the following:

- completion of preclinical laboratory tests, animal studies and formulation studies according to good laboratory practices ("GLPs") or other applicable regulations;
- submission to the FDA of an Investigational New Product Drug Application ("IND"), which must become effective before human clinical trials may begin in the United States;
- performance of adequate and well-controlled human clinical trials according to the FDA's current good clinical practices ("GCPs"), to establish the safety and efficacy of the proposed pharmaceutical product for its intended use;
- submission to the FDA of a New Drug Application ("NDA") or Biologic License Application ("BLA") for a new pharmaceutical product;

- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the pharmaceutical product is produced to assess compliance with the FDA's current Good Manufacturing Practices ("cGMP"), to assure that the facilities, methods and controls are adequate to preserve the pharmaceutical product's identity, strength, quality and purity;
- potential FDA audit of the preclinical and clinical trial sites that generated the data in support of the NDA/ BLA; and
- FDA review and approval of the NDA/BLA.

The lengthy process of seeking required approvals and the continuing need for compliance with applicable statutes and regulations require the expenditure of substantial resources and approvals are inherently uncertain.

Products for somatic cell therapy are derived from a variety of biologic sources, including directly harvested autologous, allogeneic, or cultured cell lines. Product safety requires that these sources be well characterized, uniform, and not contaminated with hazardous adventitious agents. Also, cells directly from humans pose additional product safety issues. Because of the complex nature of these products, a controlled, reproducible manufacturing process and facility are required and relied on to produce a uniform product. The degree of reliance on a controlled process varies depending on the nature of the product. Because complete chemical characterization of a biologic product is not feasible for quality control, the testing of the biologic potency receives particular attention and is costly.

Before testing any compounds with potential therapeutic value in humans, the pharmaceutical product candidate enters the preclinical testing stage. Preclinical tests include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the pharmaceutical product candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLPs. The sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA places the IND on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a pharmaceutical product candidate at any time before or during clinical trials due to safety concerns or non-compliance. Accordingly, we cannot be certain that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such clinical trial.

Clinical trials involve the administration of the pharmaceutical product candidate to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by the sponsor. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria, and the parameters to be used to monitor subject safety. Each protocol must be submitted to the FDA if conducted under a U.S. IND. Clinical trials must be conducted in accordance with GCP requirements. Further, each clinical trial must be reviewed and approved by an IRB or ethics committee if conducted outside of the United States, at or servicing each institution at which the clinical trial will be conducted. An IRB or ethics committee is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB or ethics committee also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. We intend to use third-party clinical research organizations ("CROs") to administer and conduct our planned clinical trials and will rely upon such CROs, as well as medical institutions, clinical investigators and consultants, to conduct our trials in accordance with our clinical protocols and to play a significant role in the subsequent collection and analysis of data from these trials. The failure by any of such third parties to meet expected timelines, adhere to our protocols or meet regulatory standards could adversely impact the subject product development program. Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase 1. The pharmaceutical product is usually introduced into healthy human subjects and tested for safety, dosage tolerance, absorption, metabolism, distribution and excretion. In the case of some products for severe or life-threatening diseases, such as cancer treatments, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- Phase 2. The pharmaceutical product is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- Phase 3. Clinical trials are undertaken to further evaluate dosage, clinical efficacy and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the product and provide an adequate basis for product labeling. Generally, two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of an NDA/BLA or foreign authorities for approval of marketing applications.

Post-approval studies, or Phase 4 clinical trials, may be conducted after initial marketing approval. These studies are used to gain additional experience from the treatment of patients in the intended therapeutic indication and may be requested by the FDA as a

condition of approval.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators for serious and unexpected adverse events or any finding from tests in laboratory animals that suggests a significant risk for human subjects. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor or, if used, its data safety monitoring board may suspend a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB or ethics committee can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's or ethics committee's requirements or if the pharmaceutical product has been associated with unexpected serious harm to patients.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the pharmaceutical product as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the pharmaceutical product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final pharmaceutical product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the pharmaceutical product candidate does not undergo unacceptable deterioration over its shelf life.

United States Review and Approval Processes

The results of product development, preclinical studies and clinical trials, along with descriptions of the manufacturing process, analytical tests conducted on the chemistry of the pharmaceutical product, proposed labeling and other relevant information are submitted to the FDA as part of an NDA/BLA requesting approval to market the product.

The NDA/BLA review and approval process is lengthy and difficult and the FDA may refuse to approve an NDA/BLA if the applicable regulatory criteria are not satisfied or may require additional clinical data or other data and information. Even if such data and information is submitted, the FDA may ultimately decide that the NDA/BLA does not satisfy the criteria for approval. If a product receives regulatory approval, the approval may be significantly limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. Drug manufacturers and their subcontractors are required to register their establishments with the FDA, and are subject to periodic unannounced inspections by the FDA for compliance with cGMPs, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. We cannot be certain that we, our subsidiaries or our suppliers will be able to comply with the cGMP and other FDA regulatory requirements.

Post-Approval Requirements

Any pharmaceutical products for which we or our subsidiaries receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, complying with certain electronic records and signature requirements and complying with FDA promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, promoting pharmaceutical products for uses or in patient populations that are not described in the pharmaceutical product's approved labeling (known as "off-label use"), industry-sponsored scientific and educational activities, and promotional activities involving the internet. Failure to comply with FDA requirements can have negative consequences, including adverse publicity, enforcement letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties.

The FDA also may require Phase 4 testing, risk minimization action plans and surveillance to monitor the effects of an approved product or place conditions on an approval that could restrict the distribution or use of the product.

Orphan Drugs

Under the Orphan Drug Act, special incentives exist for sponsors to develop products for rare diseases or conditions, which are defined to include those diseases or conditions that affect fewer than 200,000 people in the United States. Requests for orphan drug designation must be submitted before the submission of an NDA or BLA. In June 2012, we were notified by the FDA that CNDO-109 was granted orphan drug designation and in September 2012, the USPTO issued the first U.S. patent covering CNDO-109. If CNDO-109 is commercialized, we will be obligated to pay UCLB annual royalties based upon the net sales of product or if we sublicense CNDO-109, a portion of sub-licensing revenue we receive, if any.

If a product that has an orphan drug designation is the first such product to receive FDA approval for the disease for which it has such

designation, the product is entitled to orphan product exclusivity for that use. This means that, subsequent to approval, the FDA may not approve any other applications to market the same drug for the same disease, except in limited circumstances, for seven years. The FDA may approve a subsequent application from another person if the FDA determines that the application is for a different drug or different use, or if the FDA determines that the subsequent product is clinically superior, or that the holder of the initial orphan drug approval cannot assure the availability of sufficient quantities of the drug to meet the public's need. If the FDA approves someone else's application for the same drug that has orphan exclusivity, but for a different use, the competing drug could be prescribed by physicians outside its FDA approval for the orphan use, notwithstanding the existence of orphan exclusivity. A grant of an orphan designation is not a guarantee that a product will be approved. If a sponsor receives orphan drug exclusivity upon approval, there can be no assurance that the exclusivity will prevent another person from receiving approval for the same or a similar drug for the same or other uses.

Pediatric Information

Under the Pediatric Research Equity Act, or PREA, NDAs and BLAs or supplements to NDAs and BLAs must contain data to assess the safety and effectiveness of the treatment for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the treatment is safe and effective. The FDA may grant full or partial waivers, or deferrals, for submission of data. Unless otherwise required by regulation, PREA does not apply to any product for an indication for which orphan designation has been granted.

The Best Pharmaceuticals for Children Act, or BPCA, provides BLA holders a six-month extension of any exclusivity-patent or non-patent-for a product if certain conditions are met. Conditions for exclusivity include the FDA's determination that information relating to the use of a new drug in the pediatric population may produce health benefits in that population, FDA making a written request for pediatric studies, and the applicant agreeing to perform, and reporting on, the requested studies within a specific time frame.

Other Healthcare Laws and Compliance Requirements

In the United States, our and our subsidiaries' activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration), other divisions of the United States Department of Health and Human Services (e.g., the Office of Inspector General), the United States Department of Justice and individual United States Attorney offices within the Department of Justice, and state and local governments.

Pharmaceutical Coverage, Pricing and Reimbursement

In the United States and markets in other countries, sales of any products for which we and our subsidiaries receive regulatory approval for commercial sale will depend in part on the availability of reimbursement from third-party payors, including government health administrative authorities, managed care providers, private health insurers and other organizations. Third-party payors are increasingly examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy, and, accordingly, significant uncertainty exists as to the reimbursement status of newly approved therapeutics. Adequate third-party reimbursement may not be available for our products to enable us and our subsidiaries to realize an appropriate return on our investment in research and product development. We are unable to predict the future course of federal or state healthcare legislation and regulations, including the Affordable Care Act.

International Regulation

In addition to regulations in the United States, there are a variety of foreign regulations governing clinical trials and commercial sales and distribution of any product candidates. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval.

Government Regulation and Supervision - National

The securities industry, the Broker-Dealer Subsidiaries, and National's investment adviser businesses are subject to extensive regulation by the SEC, FINRA, NFA, state securities regulators and other governmental regulatory authorities. The principal purpose of these regulations is the protection of customers and the securities markets. The SEC is the federal agency charged with the administration of the federal securities laws. Much of the regulation of broker-dealers, however, has been delegated to self-regulatory organizations, such as FINRA, that adopt rules, subject to approval by the SEC, which govern their members and conduct periodic examinations of member firms' operations. Securities firms are also subject to regulation by state securities commissions in the states in which they are registered. All of the Broker-Dealer Subsidiaries are registered broker-dealers with the SEC and members of FINRA. They are licensed to conduct activities as a broker-dealer in all 50 states, the District of Columbia and Puerto Rico.

In addition, as registered broker-dealers and members of FINRA, the Broker-Dealer Subsidiaries are subject to the SEC's Uniform Net Capital Rule 15c3-1 ("Rule 15c3-1"), which is designed to measure the general financial integrity and liquidity of a broker-dealer and requires the maintenance of minimum net capital. Net capital is defined as the net worth of a broker-dealer subject to certain adjustments. In computing net capital, various adjustments are made to net worth that exclude assets not readily convertible into cash. Additionally, the regulations require that certain assets, such as a broker-dealer's position in securities, be valued in a conservative manner so as to avoid overstating of the broker-dealer's net capital.

National Securities is subject to Rule 15c3-1, which, among other things, requires the maintenance of minimum net capital. In February 2015, pursuant to a directive form FINRA, National Securities reverted back to using the alternative method of computing net capital from the aggregate indebtedness method. At September 30, 2016, National Securities had net capital of $6.2 million which was $6.0 million in excess of its required net capital of $250,000. National Securities is exempt from the provisions of Rule 15c-3-3 since it is an introducing broker-dealer that clears all transactions on a fully disclosed basis and promptly transmits all customer funds and securities to clearing brokers. Calculations of net capital and claimed exemptions are reviewed by an independent audit firm on an annual basis.

vFinance Investments is also subject to Rule 15c3-1, which, among other things, requires the maintenance of minimum net capital and requires that the ratio of aggregate indebtedness to net capital, both as defined in Rule 15c3-1, shall not exceed 15 to 1. At September 30, 2016, vFinance Investments had net capital of $2.2 million which was $1.2 million in excess of its required net capital of $1.0 million. vFinance Investments ratio of aggregate indebtedness to net capital was 0.8 to 1. vFinance Investments is exempt from the provisions of Rule 15c-3-3 since it is an introducing broker-dealer that clears all transactions on a fully disclosed basis and promptly transmits all customer funds and securities to clearing brokers. Calculations of net capital and claimed exemptions are reviewed by an independent audit firm on an annual basis.

National's tax preparation business is also subject to extensive regulation. Federal legislation requires income tax return preparers to, among other things, register as a tax preparer, set forth their signatures and identification numbers on all tax returns prepared by them, and retain all tax returns prepared by them for three years. Federal laws also subject income tax preparers to accuracy-related penalties in connection with the preparation of income tax returns. Preparers may be prohibited from further acting as income tax return preparers if they continuously and repeatedly engage in specified misconduct. In addition, authorized IRS e-filer providers are required to comply with certain rules and regulations, as per IRS Publication 1345 and other notices of the IRS applicable to e-filing.

IRS regulations require among other things, that all tax return preparers use a Preparer Tax Identification Number ("PTIN") as their identifying number on federal tax returns filed after December 31, 2010; require all tax return preparers to be authorized to practice before the IRS as a prerequisite to obtaining or renewing a PTIN; causing all previous issued PTIN's to expire on December 31, 2010 unless properly renewed; allowing the IRS to conduct tax compliance checks on tax return preparers; and defining the individuals who are considered "tax return preparers" for the PTIN applicants. The IRS also conducts background checks on PTIN applicants.

The Gramm-Leach-Bliley Act and related Federal Trade Commission regulations require National to adopt and disclose customer privacy policies.

Employees

As of December 31, 2016, we had 45 full-time employees at Fortress and the Fortress Companies, and, as of September 30, 2016, we had 320 full-time employees and 830 independent contractors at National.

Executive Officers of Fortress

The following table sets forth certain information about our executive officers as of December 31, 2016.

Name	Age	Position
Lindsay A. Rosenwald, M.D.	61	Chairman of the Board of Directors, President and Chief Executive Officer
Lucy Lu, M.D.	41	Executive Vice President and Chief Financial Officer
George Avgerinos, Ph.D.	63	Senior Vice President, Biologics Operations
Michael S. Weiss	50	Executive Vice Chairman Strategic Development

Lindsay A. Rosenwald, M.D. has served as a member of the Board of Directors since October 2009 and as Chairman, President and Chief Executive Officer of the Company since December 2013. In addition, Dr. Rosenwald currently serves as President and Chief Executive Officer of the following Company subsidiaries: Cellvation, Inc. and Coronado SO Co. From November 2014 to August 2015 he served as President and Chief Executive Officer of Checkpoint Therapeutics, Inc. Dr. Rosenwald currently serves as a member of the board of directors of all the Fortress Companies. Dr. Rosenwald is Co-Portfolio Manager and Partner of Opus Point Partners Management, LLC ("OPPM"), an asset management firm in the life sciences industry, which he joined in 2009. Prior to that, from 1991 to 2008, he served as the Chairman of Paramount BioCapital, Inc. Over the last 25 years, Dr. Rosenwald has acted as a

biotechnology entrepreneur and has been involved in the founding and recapitalization of numerous public and private biotechnology and life sciences companies. Dr. Rosenwald received his B.S. in finance from Pennsylvania State University and his M.D. from Temple University School of Medicine.

Lucy Lu, M.D. has served as our Executive Vice President and Chief Financial Officer since February 22, 2012. Dr. Lu has served as Interim President and Chief Executive Officer of Avenue Therapeutics, Inc., a subsidiary of the Company, since it was formed in February 2015. From to November 2014 to August 2015, Dr. Lu served as President and Chief Executive Officer of Checkpoint Therapeutics, Inc. Dr. Lu has over 10 years of experience in the healthcare industry. From February 2007 through January 2012, Dr. Lu was a senior biotechnology equity analyst with Citi Investment Research. From 2004 until joining Citi, she was with First Albany Capital, serving as Vice President from April 2004 until becoming a Principal of the firm in February 2006. Dr. Lu holds an M.D. degree from the New York University School of Medicine and an M.B.A. from the Leonard N. Stern School of Business at New York University. Dr. Lu obtained a B.A. from the University of Tennessee's College of Arts and Science.

George Avgerinos, Ph.D. has served as our Senior Vice President, Biologics Operations since June 2013. Dr. Avgerinos joined us from AbbVie, Inc., where he was Vice President, HUMIRA® Manufacturing Sciences and External Partnerships. In his 22-year career at AbbVie, Inc., formerly Abbott Laboratories, formerly BASF Bioresearch Corporation (BASF), Dr. Avgerinos was responsible for many aspects of biologics development and operations. These included the HUMIRA® operations franchise, global biologics process and manufacturing sciences, biologics CMC, manufacturing operations, and third-party manufacturing. During his tenure, Dr. Avgerinos led and participated in the development of numerous clinical candidates which included the launch of HUMIRA®. He supported expansion of the supply chain to over $9.0 billion in annual global sales. Dr. Avgerinos' efforts on HUMIRA® have been recognized with numerous awards, including the prestigious Abbott's Chairman's award in 2011. Dr. Avgerinos received a B.A. in Biophysics from the University of Connecticut and a Ph.D. in Biochemical Engineering from the Massachusetts Institute of Technology.

Michael S. Weiss has served as our Executive Vice Chairman, Strategic Development since February 2014. Mr. Weiss currently serves as a member of the board of directors of certain of the Company's subsidiaries, including Mustang Bio, Inc., Helocyte, Inc., Avenue Therapeutics, Inc., Cellvation, Inc., Caelum Biosciences, Inc. and Cyprium Therapeutics, Inc. Mr. Weiss currently serves as Executive Chairman, President and Chief Executive Officer of Mustang Bio, Inc., and Chairman of the Board of Directors of Checkpoint Therapeutics, Inc. From August 2015 to October 2015, Mr. Weiss served as Checkpoint Therapeutics, Inc.'s Interim Chief Executive Officer and President. Since December 2011, Mr. Weiss has served in multiple capacities at TG Therapeutics, Inc., a related-party ("TGTX"), and is currently its Executive Chairman, Chief Executive Officer and President, and Chairman of its Board of Directors. Mr. Weiss is a co-founder of, and has been a managing partner and principal of OPPM since 2008. Mr. Weiss earned his J.D. from Columbia Law School and his B.S. in Finance from The University at Albany. He began his professional career as a lawyer with Cravath, Swaine & Moore LLP. In 1999, Mr. Weiss founded Access Oncology which was later acquired by Keryx Biopharmaceuticals (NASDAQ: KERX) in 2004. Following the merger, Mr. Weiss remained as CEO of Keryx and grew the company to close to a $1.0 billion market capitalization company at its peak. While at Keryx, he raised over $150.0 million in equity capital through public and private offerings, executed over $100.0 million strategic alliance, negotiated multiple Special Protocol Assessments agreements with the FDA and managed multiple large clinical trials.

Available Information

We and certain of our majority-controlled subsidiaries file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy and information statements and amendments to reports filed or furnished pursuant to Sections 13(a), 14 and 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The public may obtain these filings at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549 or by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website at http://www.sec.gov that contains reports, proxy and information statements and other information regarding our Company and other companies that file materials with the SEC electronically. Copies of our and certain of our majority-controlled subsidiaries' reports on Form 10-K, Forms 10-Q and Forms 8-K may be obtained, free of charge, electronically through our website at www.fortressbiotech.com.

Item 1A. Risk Factors

Investing in our Common Stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the consolidated financial statements and the related notes, as well as the risks, uncertainties and other information set forth in the reports and other materials filed or furnished by our majority-controlled subsidiaries National Holdings Corporation ("NHLD" or "National"), Checkpoint Therapeutics, Inc. ("Checkpoint"), Mustang Bio, Inc. ("Mustang") and Avenue Therapeutics, Inc. ("Avenue") with the SEC, before deciding to invest in shares of our Common Stock. If any of the following risks or the risks included in the public filings of NHLD, Checkpoint, Mustang or Avenue were to materialize, our business, financial condition, results of operations, and future growth prospects could be materially and adversely affected. In that event, the market price of our Common Stock could decline and you could lose part of or all of your investment in our Common Stock.

Risks Related to our Growth Strategy

If we acquire, enter into joint ventures with or obtain a controlling interest in companies in the future, it could adversely affect our operating results and the value of our Common Stock thereby diluting stockholder value and disrupting our business.

As part of our growth strategy, we might acquire, enter into joint ventures with, or obtain a significant ownership stake in other companies. Acquisitions of, joint ventures with and investments in other companies, such as our acquisition of a controlling interest in NHLD, involve numerous risks, including, but not necessarily limited to:

- risk of entering new markets in which we have little to no experience;
- risk that our subsidiaries cannot generate significant or any revenue due to various uncertainties relevant to their products and services (including, in the case of our public company subsidiaries, those set forth in their public filings) and therefore that the value of their stock declines;
- diversion of financial and managerial resources from existing operations;
- successfully negotiating a proposed acquisition or investment timely and at a price or on terms and conditions favorable to us;
- the impact of regulatory reviews on a proposed acquisition or investment;
- the outcome of any legal proceedings that may be instituted with respect to the proposed acquisitions or investment;
- with respect to an acquisition, difficulties in integrating operations, technologies, services and personnel; and
- potential inability to maintain relationships with customers of the companies we may acquire or invest in.

If we fail to properly evaluate potential acquisitions, joint ventures or investments, we might not achieve the anticipated benefits of any such transaction, we might incur costs in excess of what we anticipate, and management resources and attention might be diverted from other necessary or valuable activities.

If certain of our subsidiaries cannot innovate and develop products and services and/or continue to commercialize biopharmaceutical products or grow our and their respective businesses, we may not be able to generate revenue.

Our growth strategy also depends on our and our subsidiaries' ability to generate revenue. If we and our subsidiaries cannot innovate and develop products and services or continue to commercialize current and future biopharmaceutical products or grow their respective businesses, we may not be able to generate revenue growth as anticipated.

We may not be able to generate returns for our investors if certain of our subsidiaries, most of which have limited or no operating history, no commercialized revenue generating products, and are not yet profitable, cannot obtain additional third-party financing.

As part of our growth strategy, we have made and will likely continue to make substantial investments in our subsidiaries, which at the time of investment generally have limited or no operating history, no commercialized revenue generating products, and require additional third-party financing to fund product and services development or acquisitions. Our business depends in large part on one or more of our subsidiaries' ability to innovate, in-license, acquire or invest in successful biopharmaceutical products, develop financial services and/or acquire companies in increasingly competitive and highly regulated markets. If certain of our subsidiaries do not successfully obtain additional third-party financing to commercialize products, successfully acquire companies or participate in the financial services industry, as applicable, the value of our businesses and our ownership stakes in our subsidiaries may be materially

adversely affected.

If we cannot continue to fund our and certain of our subsidiaries' research and development programs, we and our subsidiaries may be required to reduce product development, which will adversely impact our growth strategy.

Our and certain of our subsidiaries' research and development ("R&D") programs will require substantial additional capital to conduct research, preclinical testing and human studies, establish pilot scale and commercial scale manufacturing processes and facilities, and establish and develop quality control, regulatory, marketing, sales and administrative capabilities to support these programs. We expect to fund our and certain of our subsidiaries' R&D activities from a combination of cash generated from royalties and milestones from our partners in various past, ongoing and future collaborations and additional equity or debt financings from third parties. These financings could depress our stock price. If additional funds are required to support our or our subsidiaries' operations and such funds cannot be obtained on favorable terms, we and certain of our subsidiaries may not be able to develop products, which will adversely impact our growth strategy.

Collaborative relationships with third parties could cause us or certain of our subsidiaries to expend significant resources and incur substantial business risk with no assurance of financial return.

We anticipate substantial reliance upon strategic collaborations for marketing and commercializing our and certain of our subsidiaries' existing product candidates, and we and our subsidiaries may rely even more on strategic collaborations for R&D of other product candidates. We and certain of our subsidiaries may sell product offerings through strategic partnerships with pharmaceutical and biotechnology companies. If we or our subsidiaries are unable to establish or manage such strategic collaborations on terms favorable to us in the future, our revenue and drug development may be limited.

If we or certain of our subsidiaries enter into R&D collaborations during the early phases of drug development, success will in part depend on the performance of research collaborators. Neither we nor certain of our subsidiaries will directly control the amount or timing of resources devoted by research collaborators to activities related to product candidates. Research collaborators may not commit sufficient resources to our or our subsidiaries' R&D programs. If any research collaborator fails to commit sufficient resources, the preclinical or clinical development programs related to the collaboration could be delayed or terminated. Also, collaborators may pursue existing or other development-stage products or alternative technologies in preference to those being developed in collaboration with us or our subsidiaries. Finally, if we or certain of our subsidiaries fail to make required milestone or royalty payments to collaborators or to observe other obligations in agreements with them, the collaborators may have the right to terminate or stop performance of those agreements.

Establishing strategic collaborations is difficult and time-consuming. Our and certain of our subsidiaries' discussions with potential collaborators may not lead to the establishment of collaborations on favorable terms, if at all. Potential collaborators may reject collaborations based upon their assessment of our and our subsidiaries' financial, regulatory or intellectual property position. Even if we or our subsidiaries successfully establish new collaborations, these relationships may never result in the successful development or commercialization of product candidates or the generation of sales revenue. To the extent that we or our subsidiaries enter into collaborative arrangements, the related product revenues are likely to be lower than if we or our subsidiaries directly marketed and sold products.

Management of our relationships with collaborators will require:

- significant time and effort from our management team, as well as from the management teams of our subsidiaries;
- coordination of our and certain of our subsidiaries' marketing and R&D programs with the respective marketing and R&D priorities of our collaborators; and
- effective allocation of our and our subsidiaries' resources to multiple projects.

As we continue to execute our growth strategy, we may be subject to further government regulation which would adversely affect our operations.

If we engage in business combinations and other transactions that result in our Company holding passive investment interests in a number of entities, we may become subject to regulation under the Investment Company Act of 1940, as amended (the "Investment Company Act"). If we do become subject to the Investment Company Act, we would be required to register as an investment company and could be expected to incur significant registration and compliance costs in the future.

We may not be able to manage our anticipated growth, which may in turn adversely impact our business.

We will need to continue to expend funds on improving our infrastructure to address our anticipated growth. Acquisitions of

companies or products could place a strain on our management, and administrative, operational and financial systems. In addition, we may need to hire, train and manage more employees, focusing on their integration with our Company and corporate culture. Integration and management issues associated with increased acquisitions may require a disproportionate amount of our management's time and attention and distract our management from other activities related to running our business.

We may not be able to hire or retain key officers or employees for our Company, and in some cases, our subsidiaries, to implement our business strategy and develop products and businesses.

Our success depends significantly on the continued contributions of our executive officers, financial, scientific and technical personnel and consultants, and on our ability to attract additional personnel for our Company and, in some cases, our subsidiaries as we continue to implement our growth strategy and acquire and invest in companies with varied businesses. During our and our subsidiaries' operating history, many essential responsibilities have been assigned to a relatively small number of individuals. However, as we continue to implement our growth strategy and our subsidiaries grow, the demands on our key employees will expand and we will need to recruit additional qualified employees for our Company and, possibly, for our subsidiaries. The competition for such qualified personnel is intense, and the loss of services of certain key personnel or our or our subsidiaries' inability to attract additional personnel to fill critical positions could adversely affect our business.

We currently depend heavily upon the efforts and abilities of our management team and the management teams of our subsidiaries. The loss or unavailability of the services of any of these individuals could have a material adverse effect on our business, prospects, financial condition and results. In addition, we have not obtained, do not own, nor are we the beneficiary of key-person life insurance for all of our and our subsidiaries' key personnel. We only maintain a limited amount of directors' and officers' liability insurance coverage to protect all of our directors and executive officers taken together (and those of our subsidiaries). There can be no assurance that this coverage will be sufficient to cover the costs of the events that may lead to its invocation, in which case, there could be a substantial impact on our and our subsidiaries' ability to continue operations.

Certain of our officers and directors serve in similar roles with our subsidiaries, affiliates, related parties and other parties with whom we transact business; ongoing and future relationships and transactions between these parties could result in conflicts of interest.

We share directors and/or officers with certain of our subsidiaries, affiliates, related parties or other companies with which we transact business, and such arrangements could create conflicts of interest in the future, including with respect to the allocation of corporate opportunities. While we believe that we have put in place policies and procedures to identify such conflicts and that any existing agreements that may give rise to such conflicts and any such policies or procedures were negotiated at arm's length in conformity with fiduciary duties, such conflicts of interest may nonetheless arise. The existence and consequences of such potential conflicts could expose us and our subsidiaries to lost profits, claims by our investors and creditors, and harm to our and our subsidiaries' results of operations.

Risks Related to Our Biopharmaceutical Business and Industry

We are an early-stage company, with limited operating history upon which stockholders can base an investment decision.

We are primarily an early-stage biopharmaceutical company and certain of our subsidiaries, on whose success we largely rely, are also early-stage biopharmaceutical companies. To date, we and certain of our subsidiaries have engaged primarily in R&D and investment activities and have not generated any revenues from product sales. We and certain of our subsidiaries have incurred significant net losses since our inception. As of December 31, 2016, we had an accumulated deficit of approximately $245.3 million. We and certain of our subsidiaries have not demonstrated our ability to perform the functions necessary for the successful commercialization of any of our products. The successful commercialization of our and certain of our subsidiaries' products will require us and our subsidiaries to perform a variety of functions, including, but not necessarily limited to:

- identifying, developing, and commercializing product candidates;
- entering into successful licensing and other arrangements with product development partners;
- continuing to undertake pre-clinical development and clinical trials;
- participating in regulatory approval processes;
- formulating and manufacturing products; and
- conducting sales and marketing activities.

Our operations have been limited to organizing and staffing our Company (and in some cases our subsidiaries), acquiring, developing and securing the proprietary rights for, and undertaking pre-clinical development and clinical trials of product candidates, and making investments in other companies. These operations provide a limited basis for our stockholders and prospective investors to assess our ability to commercialize product candidates, develop potential product candidates and make successful investments in other companies, as well as for you to assess the advisability of investing in our securities. Each of these requirements will require substantial time, effort and financial resources.

If we or certain of our subsidiaries are unable to establish or maintain sales and marketing capabilities or fail to enter into agreements with third parties to market, distribute and sell products that may be successfully developed, neither we nor our subsidiaries may be able to effectively market and sell products and continue to generate product revenue.

Neither we nor our biopharmaceutical subsidiaries (other than Journey Medical Corporation) currently have the infrastructure for the sales, marketing and distribution of any of our product candidates, and we and certain of our subsidiaries must build and maintain this infrastructure or make arrangements with third parties to perform these functions in order to continue to commercialize any products that we may successfully develop. The establishment and development of a sales force, either by us, certain of our subsidiaries or jointly with a partner, or the establishment of a contract sales force to market any products we or our subsidiaries may develop, is expensive and time-consuming and could delay any product launch or compromise the successful commercialization of products. If we, certain of our subsidiaries, or our respective partners, are unable to establish and maintain sales and marketing capabilities or any other non-technical capabilities necessary to commercialize any products that may be successfully developed, we or certain of our subsidiaries will need to contract with third parties to market and sell such products. We or certain of our subsidiaries may not be able to establish arrangements with third parties on acceptable terms, or at all.

If any of our or certain of our subsidiaries' product candidates that are successfully developed do not achieve broad market acceptance among physicians, patients, healthcare payors and the medical community, the revenues that any such product candidates generate from sales will be limited.

Even if our or certain of our subsidiaries' product candidates receive regulatory approval, they may not gain market acceptance among physicians, patients, healthcare payors and the medical community. Coverage and reimbursement of our or certain of our subsidiaries' product candidates by third-party payors, including government payors, generally is also necessary for commercial success. The degree of market acceptance of any approved products will depend on a number of factors, including, but not necessarily limited to:

- the efficacy and safety as demonstrated in clinical trials;
- the timing of market introduction of such product candidate as well as competitive products;
- the clinical indications for which the product is approved;
- acceptance by physicians, major operators of hospitals and clinics and patients of the product as a safe and effective treatment;
- the potential and perceived advantages of product candidates over alternative treatments;
- the safety of product candidates seen in a broader patient group, including its use outside the approved indications;
- the cost of treatment in relation to alternative treatments;
- the availability of adequate reimbursement and pricing by third parties and government authorities;
- the approval, availability, market acceptance and reimbursement for a companion diagnostic, if any;
- relative convenience and ease of administration;
- the prevalence and severity of side effects and adverse events;
- the effectiveness of our sales and marketing efforts; and
- unfavorable publicity relating to the product.

If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors and patients, we or certain of our subsidiaries may not generate sufficient revenue from these products and in turn we may not become or remain profitable.

Healthcare reform and changes to restrictions on reimbursements are difficult to predict and may limit our financial returns.

Our ability and the ability of certain of our subsidiaries and all of our respective collaborators to commercialize product candidates that are successfully developed may depend, in part, on the extent to which government health administration authorities, private health insurers and other organizations will reimburse consumers for the cost of these products. These third parties are increasingly challenging both the need for and the price of new drug products. Significant uncertainty exists as to the reimbursement status of newly approved therapeutics. Adequate third-party reimbursement may not be available for our or certain of our subsidiaries' product candidates, which would prevent those product candidates from selling at price levels sufficient to realize an appropriate return on investments in research and product development.

Additionally, we are unable to predict the future course of federal or state health care legislation and regulations, including regulations related to the health care reform legislation enacted in 2010, known as the Affordable Care Act. The Affordable Care Act, any substitute legislation, and other changes in the law or regulatory framework could have a material adverse effect on our business.

Failure to be included in formularies developed by managed care organizations and coverage by other organizations may negatively impact the utilization of our and certain of our subsidiaries' products, which could harm our and our subsidiaries' market shares and could have a material adverse effect on our business and financial condition.

Managed care organizations and other third party payors try to negotiate the pricing of medical services and products to control their costs. Managed care organizations and pharmacy benefit managers typically develop formularies to reduce their cost for medications. Formularies can be based on the prices and therapeutic benefits of the available products. Due to their lower costs, generic products are often favored. The breadth of the products covered by formularies varies considerably from one managed care organization to another, and many formularies include alternative and competitive products for treatment of particular medical conditions. Failure to be included in such formularies or to achieve favorable formulary status may negatively impact the utilization and market share of our and certain of our subsidiaries' products. If our and our subsidiaries' products are not included within an adequate number of formularies or adequate reimbursement levels are not provided, or if those policies increasingly favor generic products, this could have a material adverse effect on our business and financial condition.

Our product candidates and certain of our subsidiaries' product candidates are at an early stage of development and may not be successfully developed or commercialized.

Our existing product candidates, and most of our subsidiaries' product candidates remain in the early stage of development and will require substantial further capital expenditures, development, testing and regulatory clearances prior to commercialization. The development and regulatory approval process takes several years and it is not likely that our product candidates or all our subsidiaries' product candidates, even if successfully developed and approved by the FDA, would be commercially available for several years. Of the large number of drugs in development, only a small percentage successfully completes the FDA regulatory approval process and is commercialized. Accordingly, even if we and our subsidiaries are able to obtain the requisite financing to fund development programs, we cannot assure you that any of our or our subsidiaries' product candidates will be successfully developed or commercialized, which could result in the failure of our business and a loss of your investment in our Company.

Because we and certain of our subsidiaries in-license certain product candidates from third parties, any dispute with the licensors or the non-performance of such license agreements may adversely affect our and our subsidiaries' ability to develop and commercialize the applicable product candidates.

All of our existing product candidates and certain of our subsidiaries' product candidates, including related intellectual property rights, were in-licensed from third parties. Under the terms of the license agreements, the licensors generally have the right to terminate such agreements in the event of a material breach. The licenses require us and certain of our subsidiaries to make annual, milestone or other payments prior to commercialization of any product and our and our subsidiaries' ability to make these payments depends on the ability to generate cash in the future. These license agreements also generally require the use of diligent and reasonable efforts to develop and commercialize product candidates.

If there is any conflict, dispute, disagreement or issue of non-performance between us or one of our subsidiaries, on the one hand, and the respective licensing partner, on the other hand, regarding the rights or obligations under the license agreements, including any conflict, dispute or disagreement arising from a failure to satisfy payment obligations under such agreements, the ability to develop and commercialize the affected product candidate may be adversely affected.

Product candidates that we or certain of our subsidiaries advance into clinical trials may not receive regulatory approval.

Pharmaceutical development has inherent risk. We and certain of our subsidiaries will be required to demonstrate through well-controlled clinical trials that product candidates are effective with a favorable benefit-risk profile for use in their target

indications before seeking regulatory approvals for their commercial sale. Success in early clinical trials does not mean that later clinical trials will be successful, as product candidates in later-stage clinical trials may fail to demonstrate sufficient safety or efficacy despite having progressed through initial clinical testing. Also, we or our subsidiaries may need to conduct additional clinical trials that are not currently anticipated. Companies frequently suffer significant setbacks in advanced clinical trials, even after earlier clinical trials have shown promising results. As a result, product candidates that we or our subsidiaries advance into clinical trials may not receive regulatory approval.

In addition, even if our or certain of our subsidiaries' product candidates were to obtain approval, regulatory authorities may approve any of such product candidates or any future product candidate for fewer or more limited indications than we or our subsidiaries request, may not approve the price we or our subsidiaries intend to charge for our products, may grant approval contingent on the performance of costly post-marketing clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of these scenarios could compromise the commercial prospects for one or more of our or our subsidiaries current or future product candidates.

Any product candidates we or certain of our subsidiaries advance into clinical development are subject to extensive regulation, which can be costly and time consuming, cause unanticipated delays or prevent the receipt of the required approvals to commercialize product candidates.

The clinical development, manufacturing, labeling, storage, record-keeping, advertising, promotion, import, export, marketing and distribution of any product candidate, including our product candidates, and certain of our subsidiaries' product candidates, is subject to extensive regulation by the FDA in the United States and by comparable health authorities in foreign markets. In the United States, neither we nor our subsidiaries are permitted to market our product candidates until such product candidate's Biologics License Application ("BLA") or New Drug Application is approved by the FDA. The process of obtaining approval is expensive, often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. Our development of CNDO-109, which is an individualized immunotherapy, may in particular be affected because to date the FDA has approved very few individualized immunotherapy treatments. Certain of our subsidiaries' development of individualized immunotherapies, if any, will face similar challenges. In addition to the significant clinical testing requirements, our and our subsidiaries' ability to obtain marketing approval for product candidates depends on obtaining the final results of required non-clinical testing, including characterization of the manufactured components of our and our subsidiaries' product candidates and validation of our and our subsidiaries' manufacturing processes. The FDA may determine that our or our subsidiaries' product manufacturing processes, testing procedures or facilities are insufficient to justify approval. Approval policies or regulations may change and the FDA has substantial discretion in the pharmaceutical approval process, including the ability to delay, limit or deny approval of a product candidate for many reasons. Despite the time and expense invested in clinical development of product candidates, regulatory approval is never guaranteed.

The FDA and other regulatory agencies can delay, limit or deny approval of a product candidate for many reasons, including, but not limited to:

- the FDA or comparable foreign regulatory authorities may disagree with the design or implementation of our clinical trials or those of certain of our subsidiaries;
- our or certain of our subsidiaries' inability to demonstrate to the satisfaction of the FDA that a product candidate is safe and effective for any indication;
- the FDA may not accept clinical data from trials which are conducted by individual investigators or in countries where the standard of care is potentially different from that of the United States;
- the results of clinical trials may not meet the level of statistical significance required by the FDA for approval;
- the FDA may disagree with the interpretation of data from preclinical studies or clinical trials;
- the FDA may fail to approve the manufacturing processes or facilities or those of third-party manufacturers with which we, or certain of our subsidiaries or our respective collaborators contract for clinical and commercial supplies; or
- the approval policies or regulations of the FDA may significantly change in a manner rendering the clinical data insufficient for approval.

With respect to foreign markets, approval procedures vary among countries and, in addition to the aforementioned risks, can involve additional product testing, administrative review periods and agreements with pricing authorities. In addition, recent events raising questions about the safety of certain marketed pharmaceuticals may result in increased cautiousness by the FDA and comparable foreign regulatory authorities in reviewing new pharmaceuticals based on safety, efficacy or other regulatory considerations and may result in significant delays in obtaining regulatory approvals. Any delay in obtaining, or inability to obtain, applicable regulatory

approvals would prevent us or our subsidiaries from commercializing our product candidates.

Any product candidate we or certain of our subsidiaries advance into clinical trials may cause unacceptable adverse events or have other properties that may delay or prevent their regulatory approval or commercialization or limit their commercial potential.

Unacceptable adverse events caused by any of our or certain of our subsidiaries' product candidates that we advance into clinical trials could cause regulatory authorities to interrupt, delay or stop clinical trials and could result in the denial of regulatory approval by the FDA or other regulatory authorities for any or all targeted indications and markets. This, in turn, could prevent us or certain of our subsidiaries from commercializing the affected product candidate and generating revenues from its sale. For example, in Phase 1/2 oncology trials, dose limiting toxicity ("DLT") stopping rules are commonly applied.

Neither we nor certain of our subsidiaries have completed testing of all our product candidates for the treatment of the indications for which we intend to seek product approval in humans, and we currently do not know the extent of adverse events, if any, that will be observed in patients who receive any of our or our subsidiaries' product candidates. If any of our or our subsidiaries' product candidates cause unacceptable adverse events in clinical trials, neither we nor our subsidiaries may be able to obtain regulatory approval or commercialize such products or, if such product candidates are approved for marketing, future adverse events could cause us or certain of our subsidiaries to withdraw such products from the market.

Delays in the commencement of our and certain of our subsidiaries' clinical trials could result in increased costs and delay our or certain of our subsidiaries' ability to pursue regulatory approval.

The commencement of clinical trials can be delayed for a variety of reasons, including, but not necessarily limited to, delays in:

- obtaining regulatory clearance to commence a clinical trial;
- identifying, recruiting and training suitable clinical investigators;
- reaching agreement on acceptable terms with prospective clinical research organizations ("CROs") and trial sites, the terms of which can be subject to extensive negotiation, may be subject to modification from time to time and may vary significantly among different CROs and trial sites;
- obtaining sufficient quantities of a product candidate for use in clinical trials;
- obtaining Institutional Review Board ("IRB") or ethics committee approval to conduct a clinical trial at a prospective site;
- identifying, recruiting and enrolling patients to participate in a clinical trial; and
- retaining (or replacing) patients who have initiated a clinical trial but may withdraw due to adverse events from the therapy, insufficient efficacy, fatigue with the clinical trial process or personal issues.

Any delays in the commencement of our or certain of our subsidiaries' clinical trials will delay our or our subsidiaries' ability to pursue regulatory approval for product candidates. In addition, many of the factors that cause, or lead to, a delay in the commencement of clinical trials may also ultimately lead to the denial of regulatory approval of a product candidate.

Suspensions or delays in the completion of clinical testing could result in increased costs and delay or prevent our or certain of our subsidiaries' ability to complete development of that product or generate product revenues.

Once a clinical trial has begun, patient recruitment and enrollment may be slower than we anticipate. Clinical trials may also be delayed as a result of ambiguous or negative interim results or difficulties in obtaining sufficient quantities of product manufactured in accordance with regulatory requirements and on a timely basis. Further, a clinical trial may be modified, suspended or terminated by us or our subsidiaries, an IRB, an ethics committee or a data safety monitoring committee overseeing the clinical trial, any clinical trial site with respect to that site, or the FDA or other regulatory authorities, due to a number of factors, including, but not necessarily limited to:

- failure to conduct the clinical trial in accordance with regulatory requirements or our or our subsidiaries' clinical protocols;
- inspection of the clinical trial operations or clinical trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;
- stopping rules contained in the protocol;

- unforeseen safety issues or any determination that the clinical trial presents unacceptable health risks; and

- lack of adequate funding to continue the clinical trial.

Changes in regulatory requirements and guidance also may occur, and we or certain of our subsidiaries may need to amend clinical trial protocols to reflect these changes. Amendments may require us or certain of our subsidiaries to resubmit clinical trial protocols to IRBs for re-examination, which may in turn impact the costs and timing of, and the likelihood of successfully completing, a clinical trial. If we or our subsidiaries experience delays in the completion of, or if we must suspend or terminate, any clinical trial of any product candidate, our ability or the ability of our subsidiaries to obtain regulatory approval for that product candidate will be delayed and the commercial prospects, if any, for the product candidate may suffer as a result. In addition, many of these factors may also ultimately lead to the denial of regulatory approval of a product candidate.

Even if approved, any product candidates that we or certain of our subsidiaries may develop and market may be later withdrawn from the market or subject to promotional limitations.

Neither we nor certain of our subsidiaries may be able to obtain the labeling claims necessary or desirable for the promotion of our product candidates if approved. We and certain of our subsidiaries may also be required to undertake post-marketing clinical trials. If the results of such post-marketing studies are not satisfactory or if adverse events or other safety issues arise after approval, the FDA or a comparable regulatory agency in another country may withdraw marketing authorization or may condition continued marketing on commitments from us or our subsidiaries that may be expensive and/or time consuming to complete. In addition, if we or others identify adverse side effects after any of our or our subsidiaries' products are on the market, or if manufacturing problems occur, regulatory approval may be withdrawn and reformulation of our or our subsidiaries' products, additional clinical trials, changes in labeling of our or our subsidiaries' products and additional marketing applications may be required. Any reformulation or labeling changes may limit the marketability of such products if approved.

We and certain of our subsidiaries currently rely on third parties to manufacture our preclinical and clinical pharmaceutical supplies and expect to continue to rely on them and other contractors to produce commercial supplies of our products, and our dependence on third-party suppliers could adversely impact our business.

We and certain of our subsidiaries depend on third party manufacturers for product supply. If our or our subsidiaries' contract manufacturers cannot successfully manufacture material that conforms to our specifications and with FDA regulatory requirements, we will not be able to secure and/or maintain FDA approval for those products. Our and our subsidiaries' third-party suppliers will be required to maintain compliance with cGMPs and will be subject to inspections by the FDA and comparable agencies in other jurisdictions to confirm such compliance. In the event that the FDA or such other agencies determine that our third-party suppliers have not complied with cGMP, the relevant clinical trials could be terminated or subjected to a clinical hold until such time as we are able to obtain appropriate replacement material and/or applicable compliance. Any delay, interruption or other issues that arise in the manufacture, packaging, or storage of our products as a result of a failure of the facilities or operations of our third-party suppliers to pass any regulatory agency inspection could significantly impair our ability to develop and commercialize our and our subsidiaries' products.

We and certain of our subsidiaries also rely on our manufacturers to purchase from third-party suppliers the materials necessary to produce product candidates for anticipated clinical trials. There are a small number of suppliers for certain capital equipment and raw materials that are used to manufacture those products. We do not have any control over the process or timing of the acquisition of these raw materials by our manufacturers. Moreover, we currently do not have any agreements for the commercial production of these raw materials. Any significant delay in the supply the raw material components for an ongoing clinical trial could considerably delay completion of our and our subsidiaries' clinical trials, product testing and potential regulatory approval.

We do not expect to have the resources or capacity to commercially manufacture our and certain of our subsidiaries' products internally, if approved, and will likely continue to be dependent upon third-party manufacturers. Our dependence on third parties to manufacture and supply clinical trial materials and any approved products may adversely affect our and our subsidiaries' ability to develop and commercialize products in a timely or cost-effective manner, or at all.

We and certain of our subsidiaries rely on third parties to conduct clinical trials. If these third parties do not meet agreed upon deadlines or otherwise conduct the trials as required, our or our subsidiaries' clinical development programs could be delayed or unsuccessful and neither we nor our subsidiaries may be able to obtain regulatory approval for or commercialize our product candidates when expected or at all.

Neither we nor certain of our subsidiaries have the ability to conduct all aspects of our preclinical testing or clinical trials ourselves. We and certain of our subsidiaries intend to and do use CROs to conduct planned clinical trials and will and do rely upon such CROs, as well as medical institutions, clinical investigators and consultants, to conduct our trials in accordance with specified clinical

protocols. These CROs, investigators and other third parties will and do play a significant role in the conduct of our and certain of our subsidiaries' trials and the subsequent collection and analysis of data from the clinical trials.

There is no guarantee that any CROs, investigators and other third parties upon which we and our subsidiaries rely for administration and conduct of our clinical trials will devote adequate time and resources to such trials or perform as contractually required. If any of these third parties fail to meet expected deadlines, fail to adhere to our clinical protocols or otherwise perform in a substandard manner, our or our subsidiaries' clinical trials may be extended, delayed or terminated. If any of the clinical trial sites terminate for any reason, we or our subsidiaries may lose follow-up information on patients enrolled in our ongoing clinical trials unless the care of those patients is transferred to another qualified clinical trial site. In addition, principal investigators for our and our subsidiaries' clinical trials may serve as scientific advisers or consultants to us from time to time and receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, the integrity of the data generated at the applicable clinical trial site may be jeopardized.

If our competitors develop treatments for any of the target indications of our or certain of our subsidiaries' product candidates that are approved more quickly, marketed more successfully or demonstrated to be more effective, the commercial opportunity with respect to that product candidate will be reduced or eliminated.

We and certain of our subsidiaries operate in highly competitive segments of the biopharmaceutical markets and face competition from many different sources, including commercial pharmaceutical enterprises, academic institutions, government agencies, and private and public research institutions. Our and our subsidiaries' product candidates, if successfully developed and approved, will compete with established therapies, as well as new treatments that may be introduced by our competitors. Many of our and our subsidiaries' competitors have significantly greater financial, product development, manufacturing and marketing resources than those of ours and our subsidiaries. Large pharmaceutical companies have extensive experience in clinical testing and obtaining regulatory approval for drugs. In addition, many universities and private and public research institutes are active in clinical and pre-clinical research, some in direct competition with us. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. New developments, including the development of other biological and pharmaceutical technologies and methods of treating disease, occur in the pharmaceutical and life sciences industries at a rapid pace. Developments by competitors may render our and our subsidiaries' product candidates obsolete or noncompetitive. We and our subsidiaries will also face competition from these third parties in establishing clinical trial sites and patient registration for clinical trials and in identifying and in-licensing new product candidates.

We or certain of our subsidiaries may incur substantial product liability or indemnification claims relating to the clinical testing of product candidates.

We and certain of our subsidiaries face an inherent risk of product liability exposure related to the testing of product candidates in human clinical trials, and claims could be brought against us if use or misuse of one of our or our subsidiaries' product candidates causes, or merely appears to have caused, personal injury or death. While we and our subsidiaries have and/or intend to maintain product liability insurance relating to clinical trials, that coverage may not be sufficient to cover potential claims and we or our subsidiaries may be unable to maintain such insurance. Any claims against us or our subsidiaries, regardless of their merit, could severely harm our or our subsidiaries' financial condition, strain management and other resources or destroy the prospects for commercialization of the product which is the subject of any such claim. We are unable to predict if we or our subsidiaries will be able to obtain or maintain product liability insurance for any products that may be approved for marketing. Additionally, we and certain of our subsidiaries have entered into various agreements under which we indemnify third parties for certain claims relating to product candidates. These indemnification obligations may require us or our subsidiaries to pay significant sums of money for claims that are covered by these indemnifications.

We and certain of our subsidiaries may use biological materials and hazardous materials, and any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.

We and certain of our subsidiaries may use hazardous materials, including chemicals and biological agents and compounds that could be dangerous to human health and safety or the environment. Our and certain of our subsidiaries' operations may also produce hazardous waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our product development efforts. In addition, neither we nor our subsidiaries can entirely eliminate the risk of accidental injury or contamination from these materials or wastes. Neither we nor our subsidiaries carry specific biological or hazardous waste insurance coverage, and our property and casualty and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we or any of our subsidiaries could be held liable for damages or penalized with fines in an amount exceeding our respective resources, and clinical trials or regulatory approvals could be suspended.

Although we maintain workers' compensation insurance to cover costs and expenses incurred due to injuries to our and our

subsidiaries' employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. Neither we nor our subsidiaries maintain insurance for environmental liability or toxic tort claims that may be asserted in connection with the storage or disposal of biological or hazardous materials.

In addition, we and certain of our subsidiaries may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Our success depends upon our and certain of our subsidiaries' ability to obtain and maintain intellectual property rights and take advantage of certain regulatory market exclusivity periods.

Our success depends, in large part, on our and certain of our subsidiaries' ability to obtain patent protection for product candidates and their formulations and uses. The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we, our subsidiaries, or our respective partners will be successful in obtaining patents. These risks and uncertainties include, but are not necessarily limited to, the following:

- patent applications may not result in any patents being issued;
- our and our subsidiaries' competitors, many of which have substantially greater resources than us, our subsidiaries, or our partners, and many of which have made significant investments in competing technologies, may seek, or may already have obtained, patents that may limit or interfere with our or our subsidiaries' ability to make, use, and sell potential product candidates;
- there may be significant pressure on the U.S. government and other international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful as a matter of public policy regarding worldwide health concerns; and
- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing products.

In addition, patents that may be issued or in-licensed may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable, or otherwise may not provide any competitive advantage. Third parties are often responsible for maintaining patent protection for our product candidates and those of our subsidiaries. For example, UCLB is responsible for prosecuting and maintaining patent protection for CNDO-109, at our expense for our territories. If UCLB fails to appropriately prosecute and maintain patent protection for this product candidate, our ability to develop and commercialize CNDO-109 may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products. Such a failure to properly protect intellectual property rights relating to any of our or our subsidiaries' product candidates could have a material adverse effect on our financial condition and results of operations.

In addition, U.S. patent laws may change, which could prevent or limit us or our subsidiaries from filing patent applications or patent claims to protect products and/or technologies or limit the exclusivity periods that are available to patent holders. For example, on September 16, 2011, the Leahy-Smith America Invents Act (the "Leahy-Smith Act"), was signed into law, and includes a number of significant changes to U.S. patent law. These include changes to transition from a "first-to-invent" system to a "first-to-file" system and to the way issued patents are challenged. The formation of the Patent Trial and Appeal Board now provides a quicker and less expensive process for challenging issued patents. These changes may favor larger and more established companies that have more resources to devote to patent application filing and prosecution. The USPTO implemented the America Invents Act on March 16, 2013.

We and our subsidiaries and our respective partners also rely on trade secrets and proprietary know-how to protect product candidates. Although we have taken steps to protect our and our subsidiaries' trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties, and confidential information and inventions agreements with employees, consultants and advisers, third parties may still come upon this same or similar information independently.

We also may rely on the regulatory period of market exclusivity for any of our or our subsidiaries' biologic product candidates that are successfully developed and approved for commercialization. Although this period in the United States is generally 12 years from the date of marketing approval (depending on the nature of the specific product), there is a risk that the U.S. Congress could amend laws to significantly shorten this exclusivity period, as initially proposed by President Obama. Once any regulatory period of exclusivity expires, depending on the status of our and our subsidiaries' patent coverage and the nature of the product, we may not be able to prevent others from marketing products that are biosimilar to or interchangeable with our or our subsidiaries' products, which would materially adversely affect us.

If we, certain of our subsidiaries or our respective partners are sued for infringing intellectual property rights of third parties, it will be costly and time consuming, and an unfavorable outcome in that litigation would have a material adverse effect on our business.

Our success also depends on our ability, many of our subsidiaries' ability and the ability of any of our respective current or future collaborators to develop, manufacture, market and sell product candidates without infringing the proprietary rights of third parties. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we and our subsidiaries are developing products, some of which may be directed at claims that overlap with the subject matter of our or our subsidiaries' intellectual property. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our or our subsidiaries' product candidates or proprietary technologies may infringe. Similarly, there may be issued patents relevant to our or our subsidiaries' product candidates of which we are not aware.

There is a substantial amount of litigation involving patent and other intellectual property rights in the biotechnology and biopharmaceutical industries generally. If a third party claims that we, our subsidiaries or any of our respective licensors, suppliers or collaborators infringe the third party's intellectual property rights, we or our subsidiaries may have to, among other things:

- obtain licenses, which may not be available on commercially reasonable terms, if at all;
- abandon an infringing product candidate or redesign products or processes to avoid infringement;
- pay substantial damages, including the possibility of treble damages and attorneys' fees, if a court decides that the product or proprietary technology at issue infringes on or violates the third party's rights;
- pay substantial royalties, fees and/or grant cross-licenses to product candidates; and/or
- defend litigation or administrative proceedings which may be costly regardless of outcome, and which could result in a substantial diversion of financial and management resources.

We or certain of our subsidiaries may be involved in lawsuits to protect or enforce patents or the patents of licensors, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our or certain of our subsidiaries' patents or the patents of our respective licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time consuming. An adverse result in any litigation or defense proceedings could put one or more of our or our subsidiaries' patents at risk of being invalidated, found to be unenforceable, or interpreted narrowly and could likewise put patent applications at risk of not issuing. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our or our subsidiaries' confidential information could be compromised by disclosure during this type of litigation.

We or certain of our subsidiaries may be subject to claims that our or our subsidiaries' consultants or independent contractors have wrongfully used or disclosed to us or our subsidiaries alleged trade secrets of their other clients or former employers.

As is common in the biopharmaceutical industry, we and certain of our subsidiaries engage the services of consultants to assist in the development of product candidates. Many of these consultants were previously employed at, or may have previously been or are currently providing consulting services to, other pharmaceutical companies, including our and our subsidiaries' competitors or potential competitors. We or our subsidiaries may become subject to claims related to whether these consultants have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers or their former or current customers. Litigation may be necessary to defend against these claims. Even if we or our subsidiaries are successful in defending these claims, litigation could result in substantial costs and be a distraction to management.

Any product for which we or our subsidiaries obtain marketing approval could be subject to restrictions or withdrawal from the market and we or our subsidiaries may be subject to penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with products, when and if any of them is approved.

Any product for which we or our subsidiaries obtain marketing approval, along with the manufacturing processes and facilities, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by the FDA and comparable regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration requirements, cGMP requirements relating to quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. Even if we or our subsidiaries obtain regulatory approval of a product, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval, or contain requirements for costly post-marketing testing and surveillance to monitor the safety or efficacy of the product. We or our subsidiaries also may be subject to

state laws and registration requirements covering the distribution of products. Later discovery of previously unknown problems with products, manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in actions such as:

- restrictions on product manufacturing, distribution or use;
- restrictions on the labeling or marketing of a product;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we or our subsidiaries submit;
- voluntary or mandatory recall;
- fines;
- suspension or withdrawal of marketing or regulatory approvals;
- refusal to permit the import or export of products;
- product seizure or detentions;
- injunctions or the imposition of civil or criminal penalties; and
- adverse publicity.

If we, our subsidiaries or our respective suppliers, third-party contractors, clinical investigators or collaborators are slow to adapt, or are unable to adapt, to changes in existing regulatory requirements or adoption of new regulatory requirements or policies, we, our subsidiaries, or our respective collaborators may lose marketing approval for products when and if any of them are approved, resulting in decreased revenue from milestones, product sales or royalties.

Internet and internal computer system failures or compromises of our systems or security could damage our reputation and harm our business.

Although a significant portion of our business is conducted using traditional methods of contact and communications such as face-to-face meetings, a portion of our business and the business of our subsidiaries is conducted through the Internet. We could experience system failures and degradations in the future. We also rely on space and office-sharing arrangements that impose additional burdens on our information security systems. We cannot assure you that we will be able to prevent an extended and/or material system failure and the unintentional disclosure of confidential information if any of the following or similar events occurs:

- human error;
- subsystem, component, or software failure;
- a power or telecommunications failure;
- an earthquake, fire, or other natural disaster or act of God;
- hacker attacks or other intentional acts of vandalism; or
- terrorist acts or war.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad.

We cannot predict the likelihood, nature or extent of how government regulation that may arise from future legislation or administrative or executive action taken by the new U.S. presidential administration may impact our business and industry. In particular, the new administration has taken several executive actions, including the issuance of a number of Executive Orders, that

could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. Notably, on January 23, 2017, President Trump ordered a hiring freeze for all executive departments and agencies, including the FDA, which prohibits the FDA from filling employee vacancies or creating new positions. Under the terms of the order, the freeze will remain in effect until implementation of a plan to be recommended by the Director for the Office of Management and Budget ("OMB") in consultation with the Director of the Office of Personnel Management, to reduce the size of the federal workforce through attrition. An under-staffed FDA could result in delays in FDA's responsiveness or in its ability to review submissions or applications, issue regulations or guidance or implement or enforce regulatory requirements in a timely fashion or at all. Moreover, on January 30, 2017, President Trump issued an Executive Order, applicable to all executive agencies, including the FDA, that requires that for each notice of proposed rulemaking or final regulation to be issued in fiscal year 2017, the agency shall identify at least two existing regulations to be repealed, unless prohibited by law. These requirements are referred to as the "two-for-one" provisions. This Executive Order includes a budget neutrality provision that requires the total incremental cost of all new regulations in the 2017 fiscal year, including repealed regulations, to be no greater than zero, except in limited circumstances. For fiscal years 2018 and beyond, the Executive Order requires agencies to identify regulations to offset any incremental cost of a new regulation and approximate the total costs or savings associated with each new regulation or repealed regulation. In interim guidance issued by the Office of Information and Regulatory Affairs within OMB on February 2, 2017, the administration indicates that the "two-for-one" provisions may apply not only to agency regulations, but also to significant agency guidance documents. It is difficult to predict how these requirement will be implemented, and the extent to which they will impact the FDA's ability to exercise its regulatory authority. If these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

Risks Relating to our Finances, Capital Requirements and Other Financial Matters

We are an early-stage company with a history of operating losses that is expected to continue and we are unable to predict the extent of future losses, whether we will generate significant or any revenues or whether we will achieve or sustain profitability.

We are an early-stage company and our prospects must be considered in light of the uncertainties, risks, expenses and difficulties frequently encountered by companies in their early stages of operations. We continue to generate operating losses in all periods including losses from operations of approximately $65.7 million, $50.5 million and $20.7 million for the years ended December 31, 2016, 2015 and 2014, respectively. At December 31, 2016, we had an accumulated deficit of approximately $245.3 million. We expect to make substantial expenditures and incur increasing operating costs and interest expense in the future and our accumulated deficit will increase significantly as we expand development and clinical trial activities for our product candidates and finance investments in certain of our existing and new subsidiaries in accordance with our growth strategy. Our losses have had, and are expected to continue to have, an adverse impact on our working capital, total assets and stockholders' equity. Because of the risks and uncertainties associated with product development and our investments in certain of our subsidiaries, we are unable to predict the extent of any future losses, whether we will ever generate significant or any revenues or if we will ever achieve or sustain profitability.

At December 31, 2016, the amount of debt outstanding under our promissory note in favor of Israel Discount Bank of New York ("IDB") was $14.9 million. The loan is collateralized by a security interest, a general lien upon, and right of set off against, our money market account of $15.0 million. If we default on our obligations, IDB may declare the loan immediately payable together with accrued interest and exercise its right to set-off. If an event of default occurs, we may not be able to cure it within any applicable cure period, if at all. If the maturity of our indebtedness is accelerated, we may not have sufficient funds available for repayment or we may not have the ability to borrow or obtain sufficient funds to replace the accelerated indebtedness on terms acceptable to us, or at all. In addition, the promissory note with IDB may limit our ability to finance future operations or satisfy capital needs or to engage in, expand or pursue our business activities. It may also prevent us from engaging in activities that could be beneficial to our business and our stockholders unless we repay the outstanding debt, which may not be desirable or possible.

We may need substantial additional funding and may be unable to raise capital when needed, which may force us to delay, curtail or eliminate one or more of our R&D programs, commercialization efforts and planned acquisitions and potentially change our growth strategy.

Our operations have consumed substantial amounts of cash since inception. During the years ended December 31, 2016, 2015 and 2014 we incurred R&D expenses of approximately $35.1 million, $29.8 million and $10.2 million, respectively. We expect to continue to spend significant amounts on our growth strategy. We believe that our current cash and cash equivalents will enable us to continue to fund operations in the normal course of business for at least the next 12 months. In addition, in February 2015, we raised $10.0 million in a private placement of a promissory note to NSC Biotech Venture Fund I LLC. However, until such time, if ever, as we can generate a sufficient amount of product revenue and achieve profitability, we expect to seek to finance potential cash needs. Our ability to obtain additional funding when needed, changes to our operating plans, our existing and anticipated working capital needs, the acceleration or modification of our planned R&D activities, expenditures, acquisitions and growth strategy, increased expenses or other events may affect our need for additional capital in the future and require us to seek additional funding sooner than

anticipated. In addition, if we are unable to raise additional capital when needed, we might have to delay, curtail or eliminate one or more of our R&D programs and commercialization efforts and potentially change our growth strategy.

Raising additional funds by issuing securities or through licensing or lending arrangements may cause dilution to our existing stockholders, restrict our operations or require us to relinquish proprietary rights.

To the extent that we raise additional capital by issuing equity securities, the share ownership of existing stockholders will be diluted. Any future debt financing may involve covenants that restrict our operations, including limitations on our ability to incur liens or additional debt, pay dividends, redeem our stock, make certain investments and engage in certain merger, consolidation or asset sale transactions, among other restrictions. In addition, if we raise additional funds through licensing or sublicensing arrangements, it may be necessary to relinquish potentially valuable rights to our or our subsidiaries' product candidates, or grant licenses on terms that are not favorable to us.

If we fail to maintain proper and effective internal control over financial reporting in the future, our ability to produce accurate and timely financial statements could be impaired, which could harm our operating results, investors' views of us and, as a result, the value of our Common Stock.

Pursuant to Section 404 of the Sarbanes Oxley Act of 2002 and related rules, our management is required to report on, and our independent registered public accounting firm is required to attest to, the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. To comply with the requirements of being a reporting company under the Exchange Act, we may need to further upgrade our systems, including information technology, implement additional financial and management controls, reporting systems and procedures and hire additional accounting and finance staff. If material weaknesses or deficiencies in our internal controls exist and go undetected, our financial statements could contain material misstatements that, when discovered in the future could cause us to fail to meet our future reporting obligations and cause the price of our Common Stock to decline.

Risks Associated with our Capital Stock

Some of our executives, directors and principal stockholders can control our direction and policies, and their interests may be adverse to the interests of our other stockholders.

At December 31, 2016, Lindsay A. Rosenwald, M.D., our Chairman, President and Chief Executive Officer, beneficially owned 12.3% of our issued and outstanding capital stock. At December 31, 2016, Michael S. Weiss, our Executive Vice Chairman, Strategic Development, beneficially owned 14.5% of our issued and outstanding capital stock. By virtue of their holdings and membership on our Board of Directors, Dr. Rosenwald and Mr. Weiss may individually influence our management and our affairs and may make it difficult for us to consummate corporate transactions such as mergers, consolidations or the sale of all or substantially all of our assets that may be favorable from our standpoint or that of our other stockholders.

The market price of our Common Stock may be volatile and may fluctuate in a way that is disproportionate to our operating performance.

Our stock price may experience substantial volatility as a result of a number of factors, including, but not necessarily limited to:

- announcements we make regarding our or our subsidiaries' current product candidates, acquisition of potential new product candidates and companies and/or in-licensing through multiple subsidiaries;
- sales or potential sales of substantial amounts of our Common Stock;
- our or our subsidiaries' delay or failure in initiating or completing pre-clinical or clinical trials or unsatisfactory results of any of these trials;
- announcements about us, our subsidiaries or about our competitors, including clinical trial results, regulatory approvals or new product introductions;
- developments concerning our or our subsidiaries' licensors and/or product manufacturers;
- litigation and other developments relating to our or our subsidiaries' patents or other proprietary rights or those of our competitors;
- conditions in the pharmaceutical or biotechnology industries;

- governmental regulation and legislation;
- unstable regional political and economic conditions, such as those caused by the U.S. presidential administration change;
- variations in our anticipated or actual operating results; and
- change in securities analysts' estimates of our performance, or our failure to meet analysts' expectations.

Many of these factors are beyond our control. The stock markets in general, and the market for pharmaceutical and biotechnological companies in particular, have historically experienced extreme price and volume fluctuations. These fluctuations often have been unrelated or disproportionate to the operating performance of these companies. These broad market and industry factors could reduce the market price of our Common Stock, regardless of our actual operating performance.

Sales of a substantial number of shares of our Common Stock, or the perception that such sales may occur, may adversely impact the price of our Common Stock.

Almost all of the 55,367,227 million outstanding shares of our Common Stock, inclusive of outstanding equity awards, as of December 31, 2016 are available for sale in the public market, either pursuant to Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"), or an effective registration statement. In addition, pursuant to our current shelf registration statement on Form S-3, we may issue and sell shares of our common stock having an aggregate offering price of up to $53.0 million from time to time under our Amended and Restated At Market Issuance Sales Agreement with MLV & Co. LLC and FBR Capital Markets & Co., dated August 17, 2016.

We and certain of our subsidiaries have never paid and currently do not intend to pay cash dividends in the near future. As a result, capital appreciation, if any, will be your sole source of gain.

We and certain of our subsidiaries have never paid cash dividends on any of our or their capital stock, or made stock dividends, and we and many of our subsidiaries currently intend to retain future earnings, if any, to fund the development and growth of our businesses, and retain our stock positions. In addition, the terms of existing and future debt agreements may preclude us and certain of our subsidiaries from paying cash of stock dividends. Equally, our subsidiaries are governed by their own boards of directors with individual governance and decision-making regimes and mandates to oversee such subsidiaries in accordance with their respective fiduciary duties. As a result, we alone cannot determine the acts of our subsidiaries that could maximize value to you, such as declaring cash or stock dividends. As a result, capital appreciation, if any, of our Common Stock will be your sole source of gain for the foreseeable future.

Provisions in our certificate of incorporation, our bylaws and Delaware law might discourage, delay or prevent a change in control of our Company or changes in our management and, therefore, depress the trading price of our Common Stock.

Provisions of our certificate of incorporation, our bylaws and Delaware law may have the effect of deterring unsolicited takeovers or delaying or preventing a change in control of our Company or changes in our management, including transactions in which our stockholders might otherwise receive a premium for their shares over then-current market prices. In addition, these provisions may limit the ability of stockholders to approve transactions that they may deem to be in their best interests. These provisions include:

- the inability of stockholders to call special meetings; and
- the ability of our Board of Directors to designate the terms of and issue new series of preferred stock without stockholder approval, which could include the right to approve an acquisition or other change in our control or could be used to institute a rights plan, also known as a poison pill, that would work to dilute the stock ownership of a potential hostile acquirer, likely preventing acquisitions that have not been approved by our Board of Directors.

In addition, the Delaware General Corporation Law prohibits a publicly held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our Common Stock. They could also deter potential acquirers of our Company, thereby reducing the likelihood that you could receive a premium for your Common Stock in an acquisition.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Fortress

In December 2012, we assumed a lease from TSO Laboratories, Inc., a wholly owned subsidiary of Ovamed GmbH, for approximately 8,700 square feet of space in Woburn, MA for the purpose of establishing a manufacturing facility for TSO. The term of the lease ends February 28, 2018. Annual rental payment is approximately $0.1 million.

On October 3, 2014, we entered into a 15-year lease for office space at 2 Gansevoort Street, New York, NY 10014, at an average annual rent of $2.7 million. We took possession of this space, which serves as constitute our principal executive offices, in December 2015, and took occupancy in April 2016. Total rent expense, over the full term of the lease for this space will approximate $40.7 million. In conjunction with the lease, we entered into Desk Space Agreements with two related parties: OPPM and TGTX, to occupy 10% and 45%, respectively, of the office space that requires them to pay their share of the average annual rent of $0.3 million and $1.1 million, respectively. The total net rent expense to us will approximate $16.0 million over the lease term. These initial rent allocations will be adjusted periodically for each party based upon actual percentage of the office space occupied. Additionally, we have reserved the right to execute desk space agreements with other third parties and those arrangements will also affect the cost of the lease actually borne by us.

In October 2015, we entered into a 5-year lease for approximately 6,100 square feet of office space in Waltham, MA at an average annual rent of approximately $0.2 million. We took occupancy of this space in January 2016.

In July 2016, Journey extended its lease for 2,295 square feet of office space in Scottsdale, AZ by one year, at an average annual rent of approximately $53,000, which represents the total rent expense under the extended term of the lease. Journey originally took occupancy of this space in November 2014.

National

National owns no real property. Its corporate headquarters are in space leased by National in New York, NY and Boca Raton, FL. Independent contractors individually lease the branch offices that are operated by those independent contractors. National also leases additional office space, all of which are set forth in the table below.

National's leases expire between December 2016 and October 2026. National believes the rent at each of its locations is reasonable based on current market rates and conditions. We consider the facilities of National and those of its subsidiaries to be reasonably insured and adequate for the foreseeable needs of National and its subsidiaries.

The following chart provides information related to National's lease obligations as of September 30, 2016:

Address	Approximate Square Footage	Approximate Annual Base Lease Rental	Note	Lease Termination Date
410 Park Ave, 14th Floor New York, NY	11,885	$ 594,250		30-Oct-18
600 University Street, Suite 2900, Seattle, WA	7,620	$ 295,275		31-Oct-26
2875 NE 191st Street Suite 601, Aventura, FL	5,208	$ 245,806		31-May-21
1200 N. Federal Highway, Suite 400, Boca Raton, FL	11,510	$ 207,525		31-Aug-21
111 South Wacker Drive Chicago, IL	4,544	$ 143,136	(a)	16-Apr-17
35-30 Francis Lewis Blvd Flushing NY	4,600	$ 138,000		31-Aug-21
901 E. Las Olas Blvd Fort Lauderdale FL	3,911	$ 134,150		Three months notice
14802 N. Dale Mabry Blvd Suite 101, Tampa, FL	5,000	$ 133,108		31-Dec-16
2424 N. Federal Highway Suite 200, Boca Raton, FL	6,075	$ 112,072	(b)	31-Dec-16
4000 Rt. 66, Suite 331, Tinton Falls, NJ	4,258	$ 89,418		30-Nov-20
11 Raymond Ave Suite 22, Poughkeepsie, NY	3,558	$ 94,572		30-Jun-18
540 Gidney Ave Newburgh, NY	4,535	$ 95,034		30-Jun-21
500 Portion Rd Suite 306, Lake Ronkonkoma, NY	4,727	$ 88,638		1-Jan-18
181 East Jericho Turnpike, 2nd Floor, Mineola, NY	3,165	$ 81,499		30-Apr-25
7370 College Parkway, Ft Meyers FL	3,749	$ 71,718		30-Nov-19
20 Squadron Blvd Suite 103, New City, NY	2,149	$ 75,579		31-Aug-19
3535 Military Trail Suite 201/202, Jupiter, FL	2,944	$ 63,296		Six month notice
1550 Third Ave Suite 103, New York, NY	1,212	$ 64,884		30-Nov-17
5839 Main St Williamsville, NY	3,159	$ 63,875		31-Dec-18
2800 Bruckner Blvd Suite 205, Bronx, NY	2,500	$ 60,833		30-Jun-21
28050 US19 North, Suite 300, Clearwater, FL	3,165	$ 58,679		30-Apr-20
970 N. Congress Ave Suite 200, Boynton Beach, FL	2,702	$ 54,472		30-Jun-17
11 Raymond Ave Suite 21, Poughkeepsie, NY	2,200	$ 53,016		31-Jul-20
2619 Emmons Ave Brooklyn, NY	1,500	$ 42,796		Six months notice
1580 South Main Street, Suite 101, Boerne, TX	2,224	$ 42,256		28-Feb-17
1501 W. Fairbanks Ave, Winter Park FL	1,840	$ 38,340		Six months notice
5959 Central Ave Suite 100, St Petersburg, FL	1,859	$ 34,796		30-Apr-17
5550 Merrick Rd Suite 300, Massapequa, NY	1,575	$ 31,908		Six months notice
5103 Memorial Highway, Tampa, FL	2,190	$ 32,100		28-Feb-17
982 Main St, Fishkill, NY	1,500	$ 27,876		31-Dec-16
3301 Bonita Beach Rd, Suite 107, Bonita Beach FL	1,740	$ 28,588		31-Aug-17
44 Stelton Rd., Piscataway, NJ	1,242	$ 23,158		Month to month
3265 Johnson Ave., Suite 201, Riverdale, NY	161	$ 20,700		31-Aug-17
2170 W. St. Rd. 434, Longwood, FL	940	$ 15,462		30-Sep-17

a) The premises is sublet to an unaffiliated entity
b) Notice of intent not to renew given to landlord as of the issuance of their Annual Report on Form 10-K

Item 3. Legal Proceedings

Fortress and Mustang

On January 15, 2016, Dr. Winson Tang ("Plaintiff") filed a Complaint against Dr. Rosenwald, Mr. Weiss, Mustang, Fortress and others in the Superior Court of the State of California, County of Los Angeles (Winson Tang v. Lindsay Rosenwald et al, Case No. BC607346). As amended, the complaint alleges that Dr. Tang was a third-party beneficiary of Mustang's Exclusive License Agreement with COH and should be declared the owner of 15% of Mustang's outstanding shares. After Fortress, Mustang and other defendants demurred, the Court sustained the demurrer and dismissed all claims without prejudice on September 13, 2016. Dr. Tang filed his second amended complaint on October 11, 2016, and the court again sustained the demurrer without prejudice, except for a claim for declaratory relief against Mustang. Subsequently, Dr. Tang agreed to narrow his claims and drop certain defendants from the case. Dr. Tang filed his third amended complaint on January 17, 2017, alleging one claim for declaratory relief against Mustang and two claims for breach of contract against certain other defendants. The parties are proceeding with discovery, and the case is set for a case management conference on March 15, 2017.

As of December 31, 2016, neither Fortress nor Mustang has accrued any losses in connection with this litigation as both believe that Plaintiff's claims are without merit and intend to vigorously defend this lawsuit. Even in the event of an adverse determination, Fortress and Mustang intend to satisfy any judgment from sources other than newly issued shares of Mustang, in order to prevent dilution.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

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

Market Information for Common Stock

We became a public company on November 17, 2011. Our Common Stock is listed for trading on the NASDAQ Capital Market under the symbol "FBIO." The following table sets forth the high and low intraday sales prices of our Common Stock for each full quarterly period within the two most recent fiscal years.

	2016		2015	
	High	Low	High	Low
First quarter	$ 3.29	$ 2.34	$ 4.28	$ 2.09
Second quarter	$ 4.15	$ 2.44	$ 4.44	$ 2.84
Third quarter	$ 3.14	$ 2.38	$ 3.81	$ 2.27
Fourth quarter	$ 3.01	$ 1.95	$ 3.19	$ 2.36

Holders of Record

As of March 15, 2017, there were approximately 747 holders of record of our Common Stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders who shares may be held in trust by other entities.

Repurchases

None.

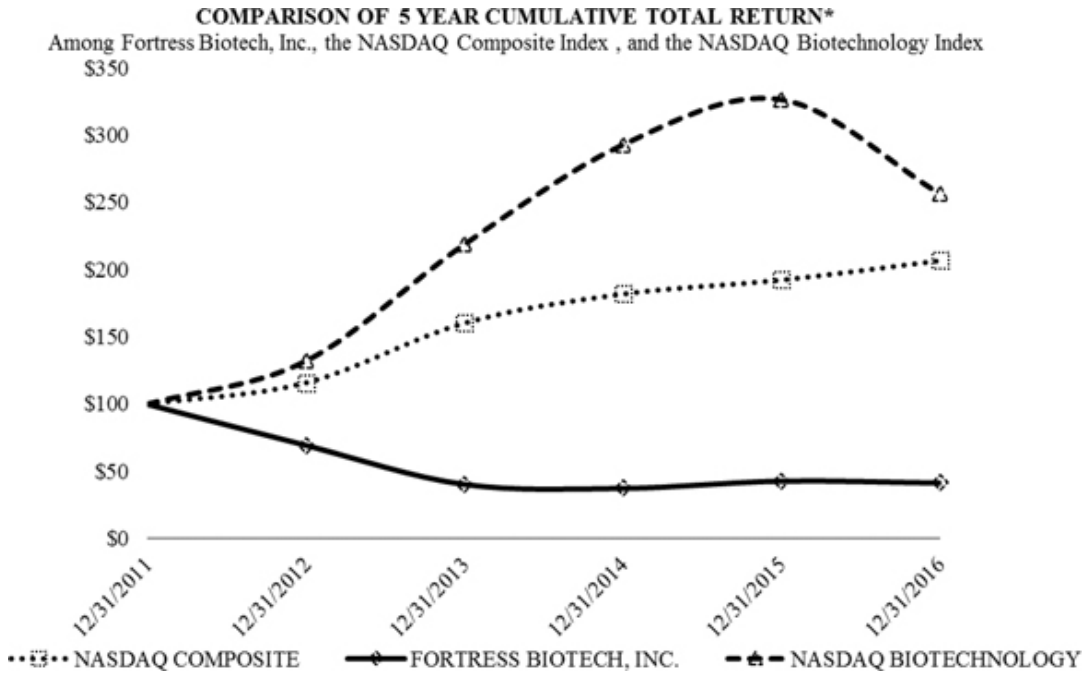
Dividends

We have never paid cash dividends and currently intend to retain our future earnings, if any, to fund the development and growth of our business.

Stock Performance Graph

The following shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or incorporated by reference into any of our other filings under the Exchange Act or the Securities Act of 1933, as amended, except to the extent we specifically incorporate it by reference into such filing.

This graph compares the cumulative total return on our Common Stock with that of the NASDAQ Composite and the NASDAQ Biotechnology index. This chart adjusts prices for stock splits and assumes the reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.



	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
Fortress Biotech, Inc.	100.00	69.38	40.46	37.54	42.92	41.54
NASDAQ Composite	100.00	115.91	160.32	181.80	192.21	206.63
NASDAQ Biotechnology	100.00	132.14	218.74	292.72	326.51	256.60

* $100 invested in December 31, 2011 in stock or index, including reinvestment of dividends.

Sales of Unregistered Securities

During 2015, we did not issue any equity securities that were not registered under the Securities Act, or that were not previously reported in a Quarterly Report on Form 10-Q or Current Report on Form 8-K of the Company.

Equity Compensation Plans

The information required by Item 5 of Form 10-K regarding equity compensation plans is incorporated herein by reference to "Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters".

Item 6. Selected Consolidated Financial Data

As part of our growth strategy, we continue to leverage our substantial biopharmaceutical business, financial and drug development expertise to invest in the acquisition, development and commercialization of novel pharmaceutical and other biomedical products. We are employing a variety of approaches and corporate structures to acquire rights to and finance a diverse portfolio of innovative pharmaceutical and biotechnology products, technologies and companies. These may include licensing, partnerships, joint ventures, and private or public spin-outs. We believe these activities will diversify our product development and, over time, may enhance

shareholder value through potential royalty, milestone and equity payments, fees as well as potential product revenues. As a result, the data in the following table might not be indicative of future financial conditions and/or results of operations.

	For the Years Ended December 31,				
($ in thousands, except per share amounts)	**2016**	**2015**	**2014**	**2013**	**2012**
Revenue					
Fortress					
Product revenue, net	$ 3,587	$ 273	$ -	$ -	$ -
Revenue - from a related party	2,570	590	-	-	-
Total Fortress revenue	6,157	863	-	-	-
National					
Commissions	5,388	-	-	-	-
Net dealer inventory gains	253	-	-	-	-
Investment banking	2,829	-	-	-	-
Investment advisory	904	-	-	-	-
Interest and dividends	155	-	-	-	-
Transfer fees and clearing services	386	-	-	-	-
Tax preparation and accounting	338	-	-	-	-
Other	70	-	-	-	-
Total National revenue	10,323	-	-	-	-
Total revenue	16,480	863	-	-	-
Operating expenses					
Fortress					
Cost of goods sold – product revenue	790	-	-	-	-
Research and development	29,602	18,402	10,239	25,682	17,468
In-process research and development	-	-	-	-	1,043
Research and development – licenses acquired	5,532	11,408	-	-	-
General and administrative	34,003	21,584	10,413	10,098	8,665
Total Fortress operating expenses	69,927	51,394	20,652	35,780	27,176
National					
Commissions, compensation and fees	10,414	-	-	-	-
Clearing fees	144	-	-	-	-
Communications	177	-	-	-	-
Occupancy	193	-	-	-	-
Licenses and registration	147	-	-	-	-
Professional fees	327	-	-	-	-
Interest	1	-	-	-	-
Depreciation and amortization	545	-	-	-	-
Other administrative expenses	315	-	-	-	-
Total National operating expenses	12,263	-	-	-	-
Total operating expenses	82,190	51,394	20,652	35,780	27,176
Loss from operations	(65,710)	(50,531)	(20,652)	(35,780)	(27,176)
Other income (expenses)					
Interest income	298	245	662	545	236
Interest expenses	(3,690)	(1,484)	(1,338)	(1,923)	(670)
Change in fair value of derivative liabilities	(1,039)	(438)	-	-	-
Change in fair value of subsidiary convertible note	(78)	-	-	-	-
Change in fair value of investments	(1,071)	(1,675)	942	-	-
Total other income (expenses)	(5,580)	(3,352)	266	(1,378)	(434)
Net loss	**(71,290)**	**(53,883)**	**(20,386)**	**(37,158)**	**(27,610)**
Less: net loss attributable to non-controlling interest	(16,195)	(5,455)	-	-	-
Net loss attributable to common stockholders	**$ (55,095)**	**$ (48,428)**	**$ (20,386)**	**$ (37,158)**	**$ (27,610)**
Basic and diluted net loss per common share	$ (1.38)	$ (1.24)	$ (0.56)	$ (1.22)	$ (1.27)
Weighted average common shares outstanding—basic and diluted					

	39,962,657	39,146,589	36,323,596	30,429,743	21,654,984
Financial Condition:					
Cash and cash equivalents	$ 88,294	$ 98,182	$ 49,759	$ 99,521	$ 40,199
Total assets	$ 170,731	$ 118,610	$ 89,325	$ 100,539	$ 40,929
Current liabilities	$ 56,565	$ 10,579	$ 4,077	$ 11,210	$ 5,132
Long-term liabilities	$ 31,198	$ 23,758	$ 14,725	$ 8,137	$ 13,890
Stockholders' equity	$ 82,968	$ 84,273	$ 70,523	$ 81,278	$ 22,033

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

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and the related notes thereto and other financial information appearing elsewhere in this Form 10-K.

Fortress Biotech, Inc. ("Fortress" or the "Company") is a biopharmaceutical company dedicated to acquiring, developing and commercializing novel pharmaceutical and biotechnology products. Fortress develops and commercializes products both within Fortress and through certain of our subsidiary companies, also referred to herein as the "Fortress Companies." Additionally, the Company recently acquired a controlling interest in National Holdings Corporation, a diversified independent brokerage company (together with its subsidiaries, herein referred to as "NHLD" or "National"). In addition to its internal development programs, the Company leverages its biopharmaceutical business expertise and drug development capabilities and provides funding and management services to help the Fortress Companies achieve their goals. The Company and the Fortress Companies may seek licensings, acquisitions, partnerships, joint ventures and/or public and private financings to accelerate and provide additional funding to support their research and development programs.

2016 Activity

Fortress Biotech, Inc.

On September 9, 2016, the Company purchased approximately 56.6% of NHLD's common stock, par value $0.02 per share, at the purchase price of $3.25 per share in cash for a total purchase price of approximately $22.9 million.

In July 2016, Fortress entered into a License Agreement with GeneMedicine, Inc. ("GeneMedicine") to develop products using GeneMedicine's oncolytic adenovirus technology. Fortress agreed to fund a research study in connection with the technology of $0.3 million for the duration of 18 months. As of October 2016, Fortress paid GeneMedicine $0.1 million to initiate the research program in connection with the license.

In September 2016, Fortress entered into a Development and License Agreement with Effcon Laboratories, Inc. ("Effcon") for the extended release formulation of methazolamide. Fortress made an upfront payment of $0.2 million, and seven additional milestone payments totaling up to $5.3 million may become payable upon the achievement of certain developmental and sales milestones. Fortress agreed to fund a related development budget of up to $1.6 million.

Avenue Therapeutics, Inc.

In December 2016, Avenue received Notices of Allowance from the U.S. Patent and Trademark Officer (" USPTO") for two continuation patent applications covering methods of administration for IV Tramadol; issuance of both patents occurred in February 2017. Avenue filed a Form 10 registration statement with the SEC on January 12, 2017.

Caelum Biosciences, Inc.

On January 1, 2017, Caelum acquired its lead asset, CAEL-101, through a license with Columbia University. CAEL-101 is a novel

antibody in Phase 1b clinical trials for the treatment of AL Amyloidosis. Interim Phase 1a/1b data on CAEL-101 was presented at the American Society of Hematology meeting in December 2016.

Cellvation, Inc.

In 2016, Cellvation, acquired novel therapies for treatment of traumatic brain injury ("TBI") from the University of Texas Health Science Center Houston ("University of Texas"). During 2016 Cellvation continued to advance: a Phase 2 study of CEVA101 in pediatric patients (ClinicalTrials.gov Identifier: NCT01851083) and a Phase 2 study of CEVA101 in adults (ClinicalTrials.gov Identifier: NCT02525432). These programs are supported by grants in excess of $10.0 million from the National Institutes of Health ("NIH") and the Department of Defense. Cellvation further continued to develop CEVA-D, a novel bioreactor that enhances the anti-inflammatory potency of bone marrow-derived cells without genetic manipulation.

Checkpoint Therapeutics, Inc.

In May 2016, Checkpoint entered into a License Agreement with Jubilant Biosys Limited ("Jubilant"), whereby Checkpoint obtained an exclusive, worldwide license (the "Jubilant License") to Jubilant's family of patents covering compounds that inhibit BRD4, a member of the bromodomain and extra-terminal ("BET") domain for cancer treatment, which Checkpoint refers to as CK-103. Also, in connection with the Jubilant License, Checkpoint entered into a sublicense agreement with TGTX to develop and commercialize the compounds licensed in the field of hematological malignancies, while Checkpoint retains the right to develop and commercialize these compounds in the field of solid tumors.

During 2016, Checkpoint submitted an IND application to the U.S. Food and Drug Administration ("FDA") for its epidermal growth factor receptors ("EGFR") inhibitor, which was accepted in August 2016, and in September 2016 Checkpoint dosed the first patient in a Phase 1/2 clinical trial. Checkpoint plans to submit an IND application for its BET inhibitor in 2017.

Escala Therapeutics, Inc.

During 2016 we extended the ManNAc open label Phase 2 clinical study for the treatment of GNE Myopathy. A Phase 1 study to further investigate ManNAc safety and tolerability in a range of kidney disorders (glomerular nephropathies) associated with hyposialylation is ongoing.

Helocyte, Inc.

On June 30, 2016, September 30, 2016, October 31, 2016 and November 30, 2016, Helocyte raised gross proceeds of $4.4 million in four separate closings of its offering of convertible promissory notes.

In March 2016, Helocyte entered into amended and restated license agreements (the "Amended and Restated Licenses") for each of its PepVax and Triplex vaccine programs with its licensor, COH, effectively splitting the its original single license for two vaccines into two separate licenses. The Amended and Restated Licenses expand the intellectual property and other rights granted to Helocyte by COH in the original single license.

In February 2016, Helocyte entered into an Investigator-Initiated Clinical Research Support Agreement with the COH to support a Phase 2 clinical study of its Triplex vaccine for CMV control in allogeneic stem cell transplant recipients (the "Triplex Research Agreement"). The Phase 2 study is additionally supported by grants from the National Institutes of Health / National Cancer Institute (the "NCI"). During 2016, Helocyte funded $2.4 million in connection with the Triplex Research Agreement.

In March 2016, Helocyte entered into an Investigator-Initiated Clinical Research Support Agreement with COH to support a Phase 2 clinical study of its PepVax vaccine for CMV control in allogeneic stem cell transplant recipients (the "PepVax Research Agreement"). The Phase 2 study is additionally supported by grants from the NCI. During 2016, Helocyte funded $2.0 million in connection with the PepVax Research Agreement.

Journey Medical Corporation

Journey launched four products in 12 months, beginning in October 2015. Three of those products are under the Journey name, and one is a co-promote agreement. Most recently, Journey launched Targadox™, a 50 mg immediate-release doxycycline hyclate coated tablet. Targadox™, is indicated as adjunctive therapy for severe acne. In 2016, Journey launched Luxamend® Wound Cream and Ceracade™ Skin Emulsion. Journey also has an agreement to co-promote Dermasorb HC for Crown Labs.

Mustang Bio, Inc.

During 2016, Mustang commenced Phase 1 trials, at the COH, treating glioblastoma patients. On December 29, 2016, an article in the *New England Journal of Medicine* reported that a patient enrolled in the Phase 1 glioblastoma trial treated with MB-101 achieved a complete response.

In a private placement offering that terminated on January 31, 2017 Mustang raised an aggregate of $94.5 million, including $39.1 million that was collected in 2016.

Critical Accounting Policies and Use of Estimates

See Note 2 to the Consolidated Financial Statements

Results of Operations

General

For the year ended December 31, 2016, we generated $16.5 million of net revenue of which $10.3 million of revenue relates to National, $2.6 million of revenue is in connection with Checkpoint's collaborative agreements with TGTX and $3.6 million of revenue relates primarily to the sale of Journey branded products. At December 31, 2016, we had an accumulated deficit of $245.3 million primarily as a result of research and development expenses, purchases of in-process research and development and general and administrative expenses. While we may in the future generate revenue from a variety of sources, including license fees, milestone payments, research and development payments in connection with strategic partnerships and/or product sales, our current product candidates are at an early stage of development and may never be successfully developed or commercialized. Accordingly, we expect to continue to incur substantial losses from operations for the foreseeable future and there can be no assurance that we will ever generate significant revenues.

Research and Development Expenses

Research and development costs primarily consist of personnel related expenses, including salaries, benefits, travel, and other related expenses, stock-based compensation, payments made to third parties for licenses and milestones costs related to in-licensed products and technology, payments made to third party contract research organizations for preclinical and clinical studies, investigative sites for clinical trials, consultants, the cost of acquiring and manufacturing clinical trial materials, costs associated with regulatory filings and patents, laboratory costs and other supplies.

Also included in research and development is the total purchase price for the licenses acquired during the period.

For the years ended December 31, 2016, 2015 and 2014, total research and development expenses were $29.6 million, $18.4 million and $10.2 million. Direct external research and development costs with respect to Fortress and each of our subsidiaries for the years ended December 31, 2016, 2015 and 2014 were: for Fortress: $2.0 million, $3.6 million and $4.7 million; Avenue: $0.9 million, $0.7 million and nil; Cellvation: $0.2 million, nil and nil; Checkpoint: $10.1 million, $4.9 million and nil; Escala: $0.9 million, $0.8 million and nil; Helocyte: $4.7 million, nil and nil; Mustang: $2.2 million, $1.5 million and nil. Stock based compensation expense included in research and development expenses in 2016, 2015 and 2014 was $4.7 million, $5.8 million and $1.1 million, respectively.

For the years ended December 31, 2016, 2015 and 2014, costs related to the acquisition of licenses were $5.5 million, $11.4 million, and nil, respectively.

General and Administrative Expenses

General and administrative expenses consist principally of personnel related costs, professional fees for legal, consulting, audit and tax services, rent and other general operating expenses not otherwise included in research and development expenses and not included in expenses related to National. For the years ended December 31, 2016, 2015 and 2014, general and administrative expenses were $34.0 million, $21.6 million and $10.4 million, respectively. Stock based compensation expense included in general and administrative expenses in 2016, 2015 and 2014 was $7.4 million, $8.5 million and $4.4 million, respectively. General and administrative expenses related to National in 2016 were $11.8 million of which $10.4 million related to commissions, compensation and fees. We anticipate general and administrative expenses will increase in future periods, reflecting continued and increasing costs associated with support of our expanded research and development activities, support of business development activities and an expanding infrastructure and increased professional fees and other costs associated therewith.

Comparison of Years Ended December 31, 2016 and 2015

($ in thousands, except per share amounts)	For the Years Ended December 31, 2016	2015	Change $	Change %
Revenue				
Fortress				
Product revenue, net	$ 3,587	$ 273	$ 3,314	1,214%
Revenue - from a related party	2,570	590	1,980	336%
Total Fortress revenue	6,157	863	5,294	613%
National				
Commissions	5,388	-	5,388	100%
Net dealer inventory gains	253	-	253	100%
Investment banking	2,829	-	2,829	100%
Investment advisory	904	-	904	100%
Interest and dividends	155	-	155	100%
Transfer fees and clearing services	386	-	386	100%
Tax preparation and accounting	338	-	338	100%
Other	70	-	70	100%
Total National revenue	10,323	-	10,323	100%
Total revenue	16,480	863	15,617	1,810%
Operating expenses				
Fortress				
Cost of goods sold – product revenue	790	-	790	100%
Research and development	29,602	18,402	11,200	61%
Research and development – licenses acquired	5,532	11,408	(5,876)	(52)%
General and administrative	34,003	21,584	12,419	58%
Total Fortress operating expenses	69,927	51,394	18,533	36%
National				
Commissions, compensation and fees	10,414	-	10,414	100%
Clearing fees	144	-	144	100%
Communications	177	-	177	100%
Occupancy	193	-	193	100%
Licenses and registration	147	-	147	100%
Professional fees	327	-	327	100%
Interest	1	-	1	100%
Depreciation and amortization	545	-	545	100%
Other administrative expenses	315	-	315	100%
Total National operating expenses	12,263	-	12,263	100%
Total operating expenses	82,190	51,394	30,796	60%
Loss from operations	(65,710)	(50,531)	(15,179)	30%
Other income (expenses)				
Interest income	298	245	53	22%
Interest expenses	(3,690)	(1,484)	(2,206)	149%
Change in fair value of derivative liabilities	(1,039)	(438)	(601)	137%
Change in fair value of subsidiary convertible note	(78)	-	(78)	100%
Change in fair value of investments	(1,071)	(1,675)	604	(36)%
Total other income (expenses)	(5,580)	(3,352)	(2,228)	66%
Net loss	**(71,290)**	**(53,883)**	**(17,407)**	**32%**
Less: net loss attributable to non-controlling interest	(16,195)	(5,455)	(10,740)	197%
Net loss attributable to common stockholders	**$ (55,095)**	**$ (48,428)**	**$ (6,667)**	**14%**

For the year ended December 31, 2016, $10.3 million of revenue was from NHLD, $2.6 million of revenue was in connection with Checkpoint's collaborative agreements with TGTX, and $3.6 million of revenue related primarily to the sale of Journey branded products.

Cost of goods sold increased by $0.8 million or 100% due to the commencement of branded sales by JMC.

Research and development expenses increased $11.2 million, or 61%, from the year ended December 31, 2015 to the year ended December 31, 2016. This increase was primarily due to an $8.1 million increase in our Fortress Companies research and development expenses, as a result of continued clinical development under their licenses, a $5.2 million increase in sponsored research, a net increase in employee costs of $0.7 million, a $0.2 million increase in consulting costs, a $0.1 million increase in expenses related to CNDO 109, and a decrease of $2.9 million in expenses related to TSO product development. The 2015 costs related to the $2.7 million potential payment due Dr. Falk Pharma in connection with its delivery of the Clinical Study Report ("CSR") (though the Company disputes the adequacy of the CSR and does not believe the payment is due). We expect to incur expenses related to our research and development efforts going forward with existing product candidates as well as potentially acquired new products. Additionally, stock-based compensation expenses decreased by $1.1 million from the year ended December 31, 2015 to the year ended December 31, 2016. The decrease primarily relates to a decrease of $0.8 million at Fortress and $0.4 million of expenses related to the stock grants by Checkpoint, offset by an increase of $0.2 million related to new stock grants made by Helocyte.

During the year ended December 31, 2016, we invested $5.5 million in new and existing research and development programs with various partners. These investments consisted of the purchase by Mustang of CAR-T from COH for $1.7 million, Checkpoint's payments totaling $3.2 million for the licenses to develop a portfolio of fully human immuno-oncology antibodies and small molecule target anti-cancer agents, Cellvation's payments totaling $0.3 million for upfront license fees and reimbursement of patent expenses to University of Texas , Helocyte's purchase of $0.1 million to develop novel immunotherapies for the prevention and treatment of CMV from COH, and Fortress' purchase totaling $0.3 million for oncolytic adenovirus technology and the extended release formulation of methazolamide.

General and administrative expenses increased $12.4 million, or 58%, from the year ended December 31, 2015 to the year ended December 31, 2016. This increase is largely due to a $4.3 million increase in legal fees. Of these legal fees, $2.1 million relates to the acquisition of National, $0.7 million relates to intellectual property, $0.6 million relates to Mustang's Winston Tang lawsuit, $0.5 million relates to Checkpoint's filing to become a public company, and $0.4 million relates to general legal expenses. In addition, salaries and benefits increased $4.9 million, with $2.2 million attributable to an increase in Journey staff due to product rollouts, $0.8 million due to an increase in Checkpoint headcount, and $1.9 million due to an increase in general staffing levels for Fortress and certain of our subsidiaries for business development and growth. The Company also faced accounting increases of $1.1 million, due to and subsequent to the preparation of subsidiaries becoming public companies, as well as rent increases of $1.0 million. In addition, consulting expenses increased by $0.6 million, and general and other expenses increased $1.8 million, which consisted of product samples and packaging $0.2 million, product storage $0.2 million, investor relations $0.2 million, board of directors fees $0.2 million, depreciation $0.1 million, taxes $0.1 million, insurance $0.1 million, dues and subscriptions $0.1 million, and $0.6 million general expenses. Stock-compensation expense decreased by $1.3 million primarily due to the one-time expense associated with subsidiary warrants granted to our Chief Executive Officer and Executive Vice Chairman, Strategic Development in July 2015 offset by expense related to new stock grants made to Checkpoint, Helocyte and Cellvation employees and consultants in 2016.

Total other expenses increased $2.2 million, or 66%, from the year ended December 31, 2015 to the year ended December 31, 2016, primarily due to an increase of $1.2 million in the amortization of debt discount, $1.0 million of fees related to the Helocyte debt offering and $0.6 million of change in fair value of contingently issuable warrants related to the contingently issuable common stock warrant in connection with Avenue's $3.0 million NSC Note, and offset by $0.6 million in the value of our investment in Origo Acquisition Corporation.

Non-controlling interests increased $10.7 million, or 197%, from the year ended December 31, 2015 to the year ended December 31, 2016. This increase reflects the increase in costs related to our subsidiaries.

Comparison of Years Ended December 31, 2015 and 2014

($ in thousands)	For the Years Ended December 31, 2015	2014	Change $	Change %
Revenue	$ 273	$ -	$ 273	100%
Revenue - from a related party	590	-	590	100%
Total revenue	863	-	863	100%
Operating expenses				
Research and development	18,402	10,239	8,163	80%
Research and development - licenses acquired	11,408	-	11,408	100%
General and administrative	21,584	10,413	11,171	107%
Total operating expenses	51,394	20,652	30,742	149%
Loss from operations	(50,531)	(20,652)	(29,879)	145%
Other income (expenses)				
Interest income	245	662	(417)	(63)%
Interest expense	(1,484)	(1,338)	(146)	11%
Change in fair value of subsidiary's warrant liabilities	(438)	-	(438)	100%
Change in fair value of investments	(1,675)	942	(2,617)	278%
Total other income (expenses)	(3,352)	266	(3,618)	(1,360)%
Net loss	(53,883)	(20,386)	(33,497)	164%
Less: net loss attributable to non-controlling interest	5,455	-	5,455	100%
Net loss attributable to common stockholders	$ (48,428)	$ (20,386)	$ (28,042)	138%

For the year ended December 31, 2015, we generated $0.6 million of revenues in connection with Checkpoint's collaboration agreement with TGTX and $0.3 million in connection with Journey's dermatology products. We did not generate any revenues from operations during the year ended December 31, 2014.

Research and development expenses increased $8.2 million, or 80%, from $10.2 million for the year ended December 31, 2014 to $18.4 million for the year ended December 31, 2015. This increase was primarily due to a $4.6 million increase in stock compensation expense which included a $1.9 million charge relating to the grant made to our Senior Vice President of Operations and a $3.0 million charge related to the mark-to-market impact on the value of the restricted stock grant made to a Checkpoint consultant. In addition, our Fortress Companies research and development expenses increased by $5.1 million in 2015, as a result of the commencement of clinical development on their licenses. In 2015 our expenses related to TSO product development decreased by $0.4 million from $3.4 million in 2014 to $3.0 million in 2015. The 2015 costs related to the $2.7 million potential payment due Dr. Falk Pharma in connection with its delivery of the CSR (though the Company disputes the adequacy of the CSR and does not believe the payment is due), partially offset by lower clinical trial costs of $2.4 million and $0.7 million charge taken in 2014 relating to the abandonment of our plans to manufacture TSO in the United States. Additionally, we experienced a $1.5 million decrease in expenses related to CNDO 109.

During the year ended December 31, 2015, we invested $11.4 million in new research and development programs with various partners. This increase was primarily due to our in-licensing of IV Tramadol for $3.0 million, the purchase by Mustang of CAR-T from COH for $2.2 million, Checkpoint's payment of $2.2 million for the license to develop a portfolio of fully human immuno-oncology targeted antibodies, Coronado SO's licensing of its Phase 2 Uracil Topical Cream, for $1.6 million, our license from NZP for the development of ManNAc for $1.3 million, our license for EGFR Inhibitors for $1.0 million (which was transferred to Checkpoint in March 2015), and Helocyte's purchase of $0.2 million to develop novel immunotherapies for the prevention and treatment of CMV from COH.

General and administrative expenses increased $11.2 million, or 107%, from $10.4 million in the year ended December 31, 2014 to $21.6 million in the year ended December 31, 2015, largely due to a $2.7 million increase in costs related to the development of a sales and marketing infrastructure for JMC and $2.0 million of professional expenses related to our business development activity, including $0.9 million of legal expenses pertaining to due diligence and activities related to the financing and formation of our

subsidiaries. In addition, salaries and benefits increased by $1.8 million as a result of headcount increases related to business development. Lastly, stock-based compensation expense increased by $4.0 million, primarily due to $2.2 million of expense for warrants for Fortress Companies' common stock issued to our President and Chief Executive Officer and Executive Vice Chairman, Strategic Development, $0.5 million of expense related to the modification of a restricted stock grant to a former member of our Board of Directors, as well as an increase in expense related to restricted stock units granted to new employees in 2015.

During the year ended December 31, 2015, interest expense primarily relates to interest and amortization of deferred financing cost on the promissory note for $10.0 million to National Securities Corporation's NSC Biotech Venture Fund I LLC (the "NSC Note") of approximately $1.0 million. While during the same period in 2014, we incurred $0.8 million of expense in connection with our loan with Hercules Technology Growth Capital, Inc. (the "Hercules Note") of which $0.3 related to the early payment penalty. The decrease in interest income in 2015 compared to 2014 was primarily due to on average lower cash balances for the period. The change in the fair value of investments primarily relates to the decrease in value of our investment in CB Pharma Acquisition Corp. ("CB Pharma") of approximately $1.7 million in 2015.

Net loss attributable to the non-controlling interests of $5.5 million relates to the share of loss in Checkpoint, Mustang, Avenue, JMC and Coronado SO for the year ended December 31, 2015.

Cash Flows for the Three Years Ended December 31, 2016, 2015 and 2014

	For the Years Ended December 31,		
($ in thousands)	**2016**	**2015**	**2014**
Statement of cash flows data:			
Total cash (used in)/provided by:			
Operating activities	$ (45,813)	$ (20,378)	$ (16,334)
Investing activities	(6,060)	7,885	(23,273)
Financing activities	41,985	60,916	(10,155)
Net (decrease) increase in cash and cash equivalents	$ (9,888)	$ 48,423	$ (49,762)

Operating Activities

Net cash used in operating activities increased by $25.4 million from the year ended December 31, 2015 to the year ended December 31, 2016, primarily due to a $17.4 million increase in net loss, a $6.7 million decrease of research and development-licenses acquired, a $2.2 million decrease in stock-based compensation expense, a $3.2 million decrease in change in operating assets and liabilities and a $0.6 million decrease in change in fair value of our long-term investments. This increase was partially offset by $1.7 million of common shares issuable for license expenses, $1.2 million increase of amortization of debt discount, an increase in financing fees on subsidiaries' convertible notes of $1.0 million, an increase of $0.9 million of depreciation and amortization expense and an increase of $0.6 million in change in fair value of derivative liabilities.

Net cash used in operating activity increased by $4.0 million from the year ended December 31, 2014 to the year ended December 31, 2015, primarily due to a $33.5 million increase in net loss. This increase was partially offset by the expensing of research and development-licenses acquired of $10.5 million, an increase in stock-based compensation expense of $8.7 million, a $6.7 million increase in accounts payable and accrued expenses and a $2.6 million in change in fair value of our long-term investments.

Investing Activities

Net cash used in investing activities of $6.1 million during the year ended December 31, 2016 primarily relates to $3.8 million in licenses being acquired in 2016, $6.4 million in purchase of property and equipment, and $0.4 million in purchase of license, offset by $4.6 million of net cash acquired in our acquisition of National.

Net cash provided by investing activities of $7.9 million during the year ended December 31, 2015 primarily relates to a net $20.0 million proceeds on maturity of marketable securities, offset by $1.3 million related to JMC's acquisition of the rights to distribute a dermatological product, acquisition of research and development licenses of Fortress Companies of $10.5 million, a working capital loan of $0.2 million to CB Pharma (now Origo Acquisition Corp. ("Origo")) and construction in process of $0.3 million, primarily related to the buildout of our new office in New York, NY.

Net cash used in investing activities during the year ended December 31, 2014 relates to our $20.0 million investment in marketable securities, our formation and interest in CB Pharma for $2.7 million, our $0.2 million investment in a third party developing a laser device for the treatment of migraine headaches, and our expired Option on Urical Topical Cream of $0.3 million.

Financing Activities

Net cash provided by financing activities of $42.0 million for the year ended December 31, 2016 primarily relates to net proceeds in connection with third party financings of certain Fortress Companies of $36.8 million, net proceeds of $7.0 million from the Opus Credit Facility, $3.9 million from Helocyte convertible debt and $0.4 million in May 2016 from our then existing at-the-market facility. During the year ended December 31, 2016, we paid-off $6.4 million of the NSC Note, from which the proceeds of $10.0 million were received in February of 2015.

Net cash provided by financing activities of $60.9 million for the year ended December 31, 2015 primarily relates to net proceeds in connection with a third party financing of a Fortress Company of $51.5 million, gross proceeds of $10.0 million from the NSC Note and $0.2 million in proceeds related to the exercise of stock options, partially offset by $0.9 million in debt issuance costs associated with the NSC Note.

Net cash used in financing activities of $10.2 million for the year ended December 31, 2014 reflects $14.0 million in proceeds from the IDB Note offset by a transfer of $14.0 million to restricted cash to secure the IDB Note, $13.7 million for the repayment of the Hercules Note as well as $0.6 million to restricted cash to secure a line of credit in connection with the New York, NY lease. These reductions in cash were partially offset by $4.1 million related to proceeds from issuances of our Common Stock.

Liquidity and Capital Resources - Fortress

To date, we have funded our operations through cash on hand, the sale of debt, option exercises and third party financings by Checkpoint and Mustang, that totaled $36.8 million of net proceeds through December 31, 2016. At December 31, 2016, we had cash and cash equivalents of $88.3 million of which $35.1 million relates to Checkpoint, $27.5 million relates to Mustang, $21.7 million relates to National, $2.0 million relates to Helocyte, $0.7 million to Journey plus restricted cash of $15.5 million, of which $14.9 million is collateralizing the IDB Note and $0.6 million of which is securing a letter of credit used as a security deposit for the New York, NY lease that became effective on October 3, 2014.

During 2016, we entered into a working capital line of credit with Opus Point Healthcare Innovations Fund L.P. for $25.0 million. As of December 31, 2016, we had $7.0 million borrowed under this facility and we borrowed an additional $0.9 million against our IDB Note. In addition, Helocyte closed on convertible notes for $4.4 million and Avenue closed on convertible notes for $0.2 million.

Further in May 2016, we raised $0.4 million related to the issuance of stock in connection with our then existing at-the-market facility and, during 2016, we raised an additional $0.2 million from the issuance of our common shares in connection with our ESPP.

We may require additional financing to fully develop and prepare regulatory filings and obtain regulatory approvals for our existing and new product candidates, fund operating losses, and, if deemed appropriate, establish or secure through third parties manufacturing for our potential products, and sales and marketing capabilities. We have funded our operations to date primarily through the sale of equity and debt securities. We believe that our current cash and cash equivalents is sufficient to fund operations for at least the next twelve months. Our failure to raise capital as and when needed would have a material adverse impact on our financial condition and our ability to pursue our business strategies. We may seek funds through equity or debt financings, collaborative or other arrangements with corporate sources, or through other sources of financing.

Liquidity and Capital Resources - National

	Ending Balance September 30,	
	2016	2015
Cash	$21,694,000	$24,642,000
Receivables from broker-dealers and clearing organizations	3,357,000	3,078,000
Securities owned – at fair value	2,357,000	887,000
Accounts payable, accrued expenses and other liabilities	19,106,000	16,846,000

At September 30, 2016 and 2015, 45% and 45%, respectively, of National's total assets consisted of cash, securities owned and receivables from clearing brokers and other broker-dealers. The level of cash used in each asset class is subject to fluctuation based on market volatility, revenue production and trading activity in the marketplace.

In addition, as registered broker-dealers and members of FINRA, the Broker-Dealer Subsidiaries are subject to the SEC's Uniform Net Capital Rule 15c3-1 ("Rule 15c3-1"), which is designed to measure the general financial integrity and liquidity of a broker-dealer and requires the maintenance of minimum net capital. Net capital is defined as the net worth of a broker-dealer subject to certain

adjustments. In computing net capital, various adjustments are made to net worth that exclude assets not readily convertible into cash. Additionally, the regulations require that certain assets, such as a broker-dealer's position in securities, be valued in a conservative manner so as to avoid overstating of the broker-dealer's net capital.

National Securities is subject to Rule 15c3-1, which, among other things, requires the maintenance of minimum net capital. In February 2015, pursuant to a directive form FINRA, National Securities reverted back to using the alternative method of computing net capital from the aggregate indebtedness method. At September 30, 2016, National Securities had net capital of $6.2 million which was $6.0 million in excess of its required net capital of $250,000. National Securities is exempt from the provisions of the SEC's Rule 15c3-3 since it is an introducing broker-dealer that clears all transactions on a fully disclosed basis and promptly transmits all customer funds and securities to clearing brokers. Calculations of net capital and claimed exemptions are reviewed by an independent audit firm on an annual basis.

vFinance Investments is also subject to Rule 15c3-1, which, among other things, requires the maintenance of minimum net capital and requires that the ratio of aggregate indebtedness to net capital, both as defined, shall not exceed 15 to 1. At September 30, 2016, vFinance Investments had net capital of $2.2 million which was $1.2 million in excess of its required net capital of $1.0 million. vFinance Investments ratio of aggregate indebtedness to net capital was 0.8 to 1. vFinance Investments is exempt from the provisions of Rule 15c3-3 since it is an introducing broker-dealer that clears all transactions on a fully disclosed basis and promptly transmits all customer funds and securities to clearing brokers. Calculations of net capital and claimed exemptions are reviewed by an independent audit firm on an annual basis.

Advances, dividend payments and other equity withdrawals from the Broker-Dealer Subsidiaries are restricted by the regulations of the SEC and other regulatory agencies. These regulatory restrictions may limit the amounts that a subsidiary may dividend or advance to the Company. During 2016 and 2015, the Broker-Dealer Subsidiaries were in compliance with the rules governing dividend payments and other equity withdrawals.

National extends unsecured credit in the normal course of business to its brokers. The determination of the appropriate amount of the reserve for uncollectible accounts is based upon a review of the amount of credit extended, the length of time each receivable has been outstanding, and the specific individual brokers from whom the receivables are due.

The objective of liquidity management is to ensure that National has ready access to sufficient funds to meet commitments, fund deposit withdrawals and efficiently provide for the credit needs of customers.

National’s primary sources of liquidity include our cash flow from operations and the sale of its securities and other financing activities. National believes that it has sufficient funds from operations to fund its ongoing operating requirements through at least 2017. However, National may need to raise funds to enhance its working capital and for strategic purposes.

At September 30, 2016, National Holdings Corporation had no interest-bearing debt.

National does not have any material commitments for capital expenditures. National routinely purchases computer equipment and technology to maintain or enhance the productivity of its employees, and such capital expenditures have amounted to $0.9 million and $0.3 million during fiscal years ended September 30, 2016 and 2015, respectively.

Contingent Contractual Payments

The following table summarizes our contractual obligations as of December 31, 2016, excluding amounts related to contingent milestone payments, as described below.

	Payments due by period				
($ in thousands)	**Total**	**Less than 1 year**	**1 to 3 years**	**4 to 5 years**	**After 5 years**
Note Payable and interest (1)	$ 29,667	$ 18,687	$ 10,980	$ -	$ -
Operating leases (2)	19,020	1,478	2,692	2,582	12,268
Annual sublicense fees (3)	25,614	7,990	7,834	6,616	3,174
Purchase obligations (4)					
Total	$ 74,301	$ 28,155	$ 21,506	$ 9,198	$ 15,442

(1) Relates to the IDB Note, NSC Note and Opus Note.

(2) Relates to our New York, NY lease, Scottsdale, AZ, as well as Waltham, MA, and Woburn, MA leases. For the New York, NY lease that commenced in 2016, we have in place Desk Share Agreements that reimburse us for $21.2 million of the $40.7 million obligation through the term of the lease.

(3) Annual sublicense fees are projected through 2025 and include payments to Ovamed, Falk, University College of London Business PLC, ("UCLB"), University of Texas ("UT"), Dana-Farber Cancer Institute ("DFCI") sponsored research agreements between COH and Mustang as well as Cellvation and UT, a Master Services Agreement between IDT Biologika and Helocyte and a Luxamend Product License and Supply Agreement between Formulated Solutions and JMC. At December 31, 2016 $3.5 million related to Falk and Ovamed are recorded in accrued expenses.

(4) We have $6.9 million of open purchase orders of which $0.4 million are for Cellvation, $3.9 million for Checkpoint, $0.1 million for Mustang, $0.8 million for Helocyte, $0.7 million for Fortress and $1.0 million for JMC. A majority of our purchase orders may be cancelled without significant penalty to us or our subsidiaries.

In September 2016, Fortress entered into a Credit Facility Agreement with Opus Point Healthcare Innovations Fund, LP ("Opus"). Under the terms of this agreement Fortress may borrow up to $25.0 million with interest art 12% per annum. At December 31, 2016, $7.0 million of debt was outstanding.

In March 2015, we closed the NSC Note. The effective interest rate on the NSC Note approximates 11.3%. The NSC Note was amended and restated on July 29, 2015 to provide that any time a Fortress Company receives from us any proceeds from the NSC Note, we may, in our sole discretion, cause the Fortress Company to issue to NSC Biotech Venture Fund I LLC a new promissory note (the "Amended NSC Note") on identical terms as the NSC Note, giving effect to the passage of time with respect to maturity. The Amended NSC Note will equal the dollar amount of the Fortress Company's share of the NSC Note and reduce our obligations under the NSC Note by such amount. We will guarantee the Amended NSC Note until the Fortress Company either completes an initial public offering or raises sufficient equity capital so that it has cash equal to five times the Amended NSC Note. At December 31, 2015, the amount of debt outstanding under the NSC Note was $10.0 million of which $2.8 million was transferred to Checkpoint, $3.6 million to Mustang and $3.0 million was transferred to Avenue. In February 2016, Checkpoint repaid its outstanding debt of $2.8 million and in December 2016 Mustang repaid its outstanding debt of $3.6 million (see Note 8 of Notes to the Consolidated Financial Statements).

In February 2014, we repaid in full the Hercules Note and entered into the IDB Note, under which we can borrow up to $15.0 million. At December 31, 2016, the amount of debt outstanding under the IDB Note was $14.9 million (see Note 8 of Notes to the Consolidated Financial Statements).

In October 2015, we entered into a 5-year lease for approximately 6,100 square feet of office space in Waltham, MA at an average annual rent of approximately $0.2 million. We took occupancy of this space in January 2016.

In July 2016, Journey extended its lease for one year for 2,295 square feet of office space in Scottsdale, AZ, at an annual rate of approximately $53,000. Journey took occupancy of this space in November 2014.

On October 3, 2014, we entered into a 15-year lease for office space at 2 Gansevoort Street New York, NY 10014, at an average annual rent of $2.7 million. We took possession of this space in December 2015, which constitutes our principal executive office. Also, on October 3, 2014, we entered into Desk Space Agreements with each of OPPM and TGTX, to occupy 10% and 45%, respectively, of the New York, NY office space that requires them to pay their share of the average annual rent of $0.3 million and $1.1 million, respectively. These initial rent allocations will be adjusted periodically for each party based upon actual percentage of the office space occupied. Additionally, we have reserved the right to execute additional desk space agreements with other third parties and those arrangements will also affect the cost of the lease actually borne by us. The lease was executed to further our business strategy, which includes forming additional subsidiaries and/or affiliate companies. Mr. Weiss is Executive Chairman, Chief Executive Officer, President and a stockholder of TGTX. The lease is subject to early termination by us, or in circumstances including events of default, the landlord, and includes a five-year extension option in our favor.

In April 2013, we entered into a three-year lease for approximately 1,500 square feet of office space in New York, NY at an average annual rent of approximately $0.1 million. Total rent expense for the term of this lease was approximately $0.4 million. We commenced occupancy of this space in May 2013. In March 2014, we closed the New York, NY office and entered into a sub-lease with a third party to occupy the space conterminously with our lease agreement. In November 2014, our sub-tenant vacated the space. As a result, we commenced activities to sub-lease this facility.

In December 2012, we assumed a lease from TSO Laboratories, Inc., a wholly owned subsidiary of Ovamed GmbH, for approximately 8,700 square feet of space in Woburn, MA for the purpose of establishing a manufacturing facility for TSO. The term of the lease ends February 28, 2018. Annual rent payment is approximately $0.1 million.

In July 2012, we entered into a five-year lease for approximately 3,200 square feet of office space in Burlington, MA at an average annual rent of approximately $0.1 million. The Company took occupancy of this space in October 2012. On December 31, 2014, we exercised an early termination clause in the lease for a fee of $0.1 million payable in January 2015, reducing the lease term to three years.

Off-Balance Sheet Arrangements

We do not have any financings or other relationships with unconsolidated entities or other persons.

Recently Issued Accounting Pronouncements

See Note 2 of Notes to the Consolidated Financial Statements for a discussion of recent accounting standards and pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Fortress

We are exposed to market risk related to changes in interest rates. As of December 31, 2016, we had no marketable securities, exclusive of National. As of December 31, 2015, we had no marketable securities. As of December 31, 2014, we had marketable securities of $20.0 million, consisting of U.S. Treasury Bills and a mutual fund. Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates, particularly because we typically invest in short-term securities. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 100 basis point change in interest rates would not have a material effect on the fair market value of our portfolio.

The IDB Note bears interest at a rate per annum of 2.25%. This rate is set at a margin of 1.50% over the rate earned on the cash pledging this loan. To the extent the interest payable on the pledge account increases, we would pay higher interest on the outstanding debt.

National

National's primary market risk arises from the fact that it engages in proprietary trading and makes dealer markets in equity securities. Accordingly, the Company may be required to maintain certain amounts of inventories in order to facilitate customer order flow. National may incur losses as a result of price movements in these inventories due to changes in interest rates, foreign exchange rates, equity prices and other political factors. National is not subject to direct market risk due to changes in foreign exchange rates. However, National is subject to market risk as a result of changes in interest rates and equity prices, which are affected by global economic conditions. National manages its exposure to market risk by limiting its net long or short positions. Trading and inventory accounts are monitored daily by management and National has instituted position limits.

Credit risk represents the amount of accounting loss National could incur if counterparties to its proprietary transactions fail to perform and the value of any collateral proves inadequate. Although credit risk relating to various financing activities is reduced by the industry practice of obtaining and maintaining collateral, National maintains more stringent requirements to further reduce its exposure. National monitors its exposure to counterparty risk on a daily basis by using credit exposure information and monitoring collateral values. National maintains a credit committee, which reviews margin requirements for large or concentrated accounts and sets higher requirements or requires a reduction of either the level of margin debt or investment in high-risk securities or, in some cases, requiring the transfer of the account to another broker-dealer.

National monitors its market and credit risks daily through internal control procedures designed to identify and evaluate the various risks to which National is exposed. There can be no assurance, however, that National's risk management procedures and internal controls will prevent losses from occurring as a result of such risks.

The following table shows the fair values of National's securities owned and securities sold, but not yet purchased as of September 30, 2016 ($ in thousands):

September 30, 2016	Securities owned	Securities sold, but not yet purchased
Corporate stocks	$ 101	$ 298
Municipal bonds	2,111	—
Restricted stock	145	—
Total	$ 2,357	$ 298

Item 8. Financial Statements and Supplementary Data.

The information required by this Item is set forth in the consolidated financial statements and notes thereto beginning at page F-1 of this Annual Report on Form 10-K.

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

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

Controls and Procedures

Disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) are designed only to provide reasonable assurance that they will meet their objectives. Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness, as of December 31, 2016, of the design and operation of our disclosure controls and procedures, as such term is defined in Exchange Act Rules 13a-15(e) and 15d-15(e). Based on this evaluation, our principal executive officer and principal financial officer have concluded that, as of such date, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in our Exchange Act reports is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Internal Control over Financial Reporting

Management's Report on Internal Control over Financial Reporting.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Internal control over financial reporting refers to the process designed by, or under the supervision of, our principal executive officer and principal financial officer, 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 financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

(1) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;

(2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are being made only in accordance with authorization of our management and directors; and

(3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisitions, use or disposition of our assets that could have a material effect on the financial statements.

Internal control over financial reporting has inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper management override. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process. Therefore, it is possible to design into the process safeguards to reduce, though not eliminate, this risk.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2016. In making the assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework (2013)*.

The internal controls over financial reporting for an acquisition completed during fiscal 2016 was excluded from management's assessment. This excluded acquisition constituted approximately 23% of our consolidated assets of $171.0 million and approximately 63% of our consolidated revenues of $16.5 million for the fiscal year ended December 31, 2016. Based on the results of this assessment, management (including our Chief Executive Officer and our Chief Financial Officer) has concluded that, as of December 31, 2016, our internal control over financial reporting was effective.

Attestation Report of Registered Public Accounting Firm

The effectiveness of our internal controls over financial reporting as of December 31, 2016 has been audited by our independent registered accounting firm, BDO USA, LLP, as stated in their attestation report, which is included on page F-2 herein.

Changes in Internal Controls over Financial Reporting.

There were no changes in our internal control over financial reporting during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information required by this Item concerning our executive officers and directors is incorporated by reference from the sections captioned "Proposal One - Election of Directors", "Corporate Governance Matters" and "Section 16(a) Beneficial Ownership Reporting Compliance" contained in our proxy statement related to the 2017 Annual Meeting of Stockholders currently scheduled to be held on June 15, 2017, which we intend to file with the Securities and Exchange Commission within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

The information required by this Item concerning the identification of our executive officers is set forth at the end of Part I of this Annual Report on Form 10-K.

Item 11. Executive Compensation

The information required by this Item is incorporated by reference to the information under the sections captioned "Executive Compensation and Other Matters," "Compensation Discussion and Analysis," "Summary Compensation Table," "Grants of Plan-Based Awards," "Outstanding Equity Awards at 2016 Fiscal Year-End," "Option Exercises and Stock Vested," "Director Compensation in Fiscal Year 2016," "Compensation Committee Interlocks and Insider Participation" and "Transactions with Related Persons" in the proxy statement related to our 2017 Annual Meeting of Stockholders currently scheduled to be held on June 15, 2017.

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

The following table sets forth the indicated information as of December 31, 2016 with respect to our equity compensation plans:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Restricted Stock Units, Warrants and Rights (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a)) (c)
Equity compensation plans approved by stockholders	4,592,974	$ 4.37	6,021,799
Equity compensation plans not approved by stockholders	-	$ -	-
Total	4,592,974		6,021,799

Our equity compensation plans consist of the Employee Stock Purchase Plan, Fortress Biotech, Inc. 2007 Stock Incentive Plan, Fortress Biotech, Inc. 2013 Stock Incentive Plan, as amended, and the Fortress Biotech Long-Term Incentive Plan, all of which were approved by our stockholders. We do not have any equity compensation plans or arrangements that have not been approved by our stockholders.

The other information required by this Item is incorporated by reference to the information under the section captioned "Security Ownership of Certain Beneficial Owners and Management" contained in the proxy statement related to our 2017 Annual Meeting of Stockholders currently scheduled to be held on June 15, 2017.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item is incorporated by reference to the information under the section captioned "Transactions with Related Persons" and "Corporate Governance Matters" in the proxy statement related to our 2017 Annual Meeting of Stockholders

currently scheduled to be held on June 15, 2017.

Item 14. Principal Accounting Fees and Services

The information required by this Item is incorporated by reference to the information under the section captioned "Audit Committee Report" in the proxy statement related to our 2017 Annual Meeting of Stockholders currently scheduled to be held on June 15, 2017.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) Financial Statements.

The following financial statements are filed as part of this report:

(b) Exhibits.

		Incorporated by Reference (Unless Otherwise Indicated)			
Exhibit Number	**Exhibit Title**	**Form**	**File**	**Exhibit**	**Filing Date**
2.1	Agreement and Plan of Merger, by and among Fortress Biotech, Inc., FBIO Acquisition, Inc. and National Holdings Corporation, dated April 27, 2016.	8-K	—	2.1	April 28, 2016
2.2	Amendment No. 1 to Agreement and Plan of Merger by and among Fortress Biotech, Inc., FBIO Acquisition, Inc. and National Holdings Corporation, dated August 12, 2016.	8-K	—	2.1	August 12, 2016
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	10-12G	000-54463	3.1	July 15, 2011
3.2	First Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Registrant.	10-12G	000-54463	3.2	July 15, 2011
3.3	Certificate of Designation, Preferences and Rights of the Series B Preferred Stock.	10-12G	000-54463	3.3	July 15, 2011
3.4	Certificate of Designation, Preferences and Rights of the Series C Preferred Stock.	10-12G	000-54463	3.4	July 15, 2011
3.5	Second Amended and Restated Bylaws of the Registrant.	8-K	—	3.7	October 31, 2013
3.6	Second Certificate of Amendment of Amended and Restated Certificate of Incorporation, as amended.	10-K	—	3.8	March 14, 2014
3.7	Third Certificate of Amendment of Amended and Restated Certificate of Incorporation, as amended	8-K	—	3.9	April 27, 2015

4.1	Form of Common Stock Certificate.	10-12G	000-54463	4.1	July 15, 2011
4.2	Form of Series A Preferred Stock Certificate.	10-12G	000-54463	4.2	July 15, 2011
4.3	Form of Series B Preferred Stock Certificate.	10-12G	000-54463	4.3	July 15, 2011
4.4	Form of Series C Preferred Stock Certificate.	10-12G	000-54463	4.4	July 15, 2011
4.5	Form of Warrant for the purchase of shares of Common Stock issued by the Registrant in connection with the 2009 bridge financing.	10-12G	000-54463	4.6	July 15, 2011
4.6	Form of Warrant for the purchase of shares of Common Stock issued by the Registrant in connection with the Series A financing.	10-12G	000-54463	4.7	July 15, 2011
4.7	Form of Series C Convertible Preferred Stock Purchase Warrant issued by the Registrant in connection with the 2011 Series C financing.	10-12G	000-54463	4.8	July 15, 2011
4.8	Form of Consultant/Agent Warrant to Purchase Common Stock.	10-12G	000-54463	4.10	July 15, 2011
4.9	Warrant to purchase Common Stock issued by the Registrant in connection with the 2012 secured loan facility with Hercules Technology Growth Capital, Inc.	8-K	—	4.10	August 29, 2012
10.1	Coronado Biosciences, Inc. 2007 Stock Incentive Plan.#	10-12G	000-54463	10.8	July 15, 2011
10.2	Form of Stock Option Award Agreement.#	10-12G	000-54463	10.9	July 15, 2011
10.3	Consulting Agreement, entered into as of September 21, 2010, by and between the Registrant and Eric Rowinsky, M.D.#	10-12G	000-54463	10.24	July 15, 2011
10.4	Form of Indemnification Agreement by and between the Registrant and its officers and directors.	10-12G/A	000-54463	10.25	August 23, 2011
10.5	Employment Agreement, made and entered into on February 21, 2012, by and between the Registrant and Lucy Lu, M.D.#	8-K	—	10.35	February 23, 2012
10.6	Coronado Biosciences, Inc. 2012 Employee Stock Purchase Plan.#	DEF 14A	—	—	July 13, 2012
10.7	Promissory Note issued by Registrant to Israel Discount Bank of New York, dated February 13, 2014.	8-K	—	10.53	February 18, 2014
10.8	Assignment and Pledge of Money Market Account dated February 13, 2014 in favor of Israel Discount Bank of New York.	8-K	—	10.54	February 18, 2014

10.9	Restricted Stock Issuance Agreement, dated as of February 20, 2014, by and between the Registrant and Michael S. Weiss#	8-K/A	—	10.55	February 26, 2014
10.10	Shareholders' Agreement, dated as of February 20, 2014, by and among certain shareholders of the Registrant named therein.	8-K/A	—	10.56	February 26, 2014
10.11	Restricted Stock Issuance Agreement, dated as of December 19, 2013, by and between the Registrant and Michael S. Weiss#	10-K	—	10.57	March 14, 2014
10.12	Restricted Stock Issuance Agreement, dated as of December 19, 2013, by and between the Registrant and Lindsay A. Rosenwald, M.D.#	10-K	—	10.58	March 14, 2014
10.13	Form of Coronado Biosciences, Inc. 2013 Stock Incentive Plan Award Agreement (2013 Stock Incentive Plan).#	S-8	333-194588	10.60	March 14, 2014
10.14	Form of Subscription Agreement.	8-K	—	10.61	November 10, 2014
10.15	Note Purchase Agreement, dated February 27, 2015, by and between the Registrant and NSC Biotech Venture Fund I LLC.	8-K	—	10.62	March 5, 2015
10.16	Form of SubCo Securities Purchase Agreement.	8-K	—	10.64	March 5, 2015
10.17	Form of SubCo Warrant.	8-K	—	10.65	March 5, 2015
10.18	Form of SubCo Promissory Note.	8-K	—	10.66	March 5, 2015
10.19	Coronado Biosciences, Inc. Deferred Compensation Plan for Directors, dated March 12, 2015.#	8-K	—	10.67	March 18, 2015
10.20	Fortress Biotech, Inc. 2013 Stock Incentive Plan, as amended.#	DEF 14A	—	—	June 4, 2015
10.21	Fortress Biotech, Inc. Long-Term Incentive Plan.#	DEF 14A	—	—	June 4, 2015
10.22	Restricted Stock Unit Award Agreement between Fortress Biotech, Inc. and George Avgerinos effective July 15, 2015.#	8-K	—	10.70	July 17, 2015
10.23	Amended and Restated Promissory Note issued by the Registrant to NSC Biotech Venture Fund I LLC, dated July 29, 2015.	8-K	—	10.71	August 4, 2015
10.24	Form of Support and Voting Agreement by and among Fortress Biotech, Inc., FBIO Acquisition, Inc., and certain officers and directors (and certain of their affiliates) of National Holdings Corporation.	8-K	—	10.28	April 28, 2016
10.25	Stockholder Rights Agreement by and between National Holdings Corporation and FBIO Acquisition, Inc., dated April 27, 2016.	8-K	—	10.29	April 28, 2016

10.26	Form of Voting Agreement by and among Fortress Biotech, Inc., FBIO Acquisition, Inc., and certain officers and directors (and certain of their affiliates) of National Holdings Corporation.	8-K	—	10.30	April 28, 2016
10.27	Amendment No. 2 to At Market Issuance Sales Agreement, dated April 28, 2016, between Fortress Biotech, Inc. and MLV & Co. LLC.	8-K	—	10.31	May 4, 2016
10.28	Amended and Restated At Market Issuance Sales Agreement, dated August 17, 2016, between the registrant, MLV & Co. LLC and FBR Capital Markets & Co.	8-K	—	10.32	August 17, 2016
10.29	Credit Facility Agreement dated as of September 14, 2016, by and among Fortress Biotech, Inc. and Opus Point Healthcare Innovations Fund, LP.	10-Q	—	10.33	November 9, 2016
10.30	Form of Fortress Biotech, Inc. Convertible Secured Promissory Note.	10-Q	—	10.34	November 9, 2016
10.31	Form of Common Stock Purchase Warrant.	10-Q	—	10.35	November 9, 2016
10.32	Pledge and Security Agreement dated as of September 14, 2016 made by the Fortress Biotech, Inc. and FBIO Acquisition, Inc. in favor of Opus Point Healthcare Innovations Fund, LP.	10-Q	—	10.36	November 9, 2016
14.1	Code of Ethics of Registrant applicable to Directors, Officers and Employees.	S-1	333-177041	14.1	September 28, 2011
16.1	Letter from EisnerAmper LLP to the Securities and Exchange Commission dated October 3, 2016.	8-K	—	16.1	October 3, 2016
21.1	Subsidiaries of the Registrant.	—	—	—	Filed herewith
23.1	Consent Independent Registered Public Accounting Firm.	—	—	—	Filed herewith
23.2	Consent Independent Registered Public Accounting Firm.	—	—	—	Filed herewith
24.1	Power of Attorney (included on the signature page of this Form 10-K)	—	—	—	Filed herewith
31.1	Certification of Chairman, President and Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
31.2	Certification of Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
32.1	Certification of the Chairman, President and Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith

32.2	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	—	—	—	Filed herewith
101.INS	XBRL Instance Document.	—	—	—	Filed herewith
101.SCH	XBRL Taxonomy Extension Schema Document.	—	—	—	Filed herewith
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.	—	—	—	Filed herewith
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.	—	—	—	Filed herewith
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.	—	—	—	Filed herewith
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.	—	—	—	Filed herewith

Management contract or compensatory plan.

Item 16. Form 10-K Summary.

None.

FORTRESS BIOTECH, INC. AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

Index to Consolidated Financial Statements

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Fortress Biotech, Inc. and subsidiaries
New York, New York

We have audited the accompanying consolidated balance sheet of Fortress Biotech, Inc. and subsidiaries as of December 31, 2016 and the related consolidated statements of operations, stockholders' equity, and cash flows for the year ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the auditing standards of the Public Company Accounting Oversight Board (United States) and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Fortress Biotech, Inc. and subsidiaries at December 31, 2016, and the results of its operations and its cash flows for the year ended December 31, 2016**,** in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Fortress Biotech, Inc. and subsidiaries internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organization of the Treadway Commission (COSO) and our report dated March 16, 2017 expressed an unqualified opinion thereon.

/s/ BDO USA, LLP

Boston, Massachusetts
March 16, 2017

Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders
Fortress Biotech, Inc. and subsidiaries
New York, New York

We have audited Fortress Biotech, Inc. and subsidiaries internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Fortress Biotech, Inc. and subsidiaries' management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed 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. A company's 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 the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

As indicated in the accompanying Item 9A, Management's Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of an acquisition completed during fiscal 2016, which is included in the consolidated balance sheet of Fortress Biotech, Inc. as of December 31, 2016, and the related consolidated statements of operations, stockholders' equity and cash flows for the year then ended. This excluded acquisition constituted approximately 23% of consolidated assets as of December 31, 2016 and approximately 63% of consolidated revenues for the year then ended. Management did not assess the effectiveness of internal control over financial reporting of these acquisitions because of the timing of the acquisition, which was completed during fiscal 2016. Our audit of internal control over financial reporting of Fortress Biotech, Inc. also did not include an evaluation of the internal control over financial reporting of these acquisitions.

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 our opinion, Fortress Biotech, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of Fortress Biotech, Inc. and subsidiaries as of December 31, 2016, and the related consolidated statements of operations, stockholders' equity, and cash flows for the year ended December 31, 2016 and our report dated March 16, 2017expressed an unqualified opinion thereon.

/s/ BDO USA, LLP
Boston, Massachusetts
March 16, 2017

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Fortress Biotech, Inc.

We have audited the accompanying consolidated balance sheet of Fortress Biotech, Inc. (formerly Coronado Biosciences, Inc.) and its subsidiaries (the "Company") as of December 31, 2015, and the related consolidated statements of operations, stockholders' equity and cash flows for each of the years in the two-year period ended December 31, 2015. The financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Fortress Biotech, Inc. and its subsidiaries as of December 31, 2015 and the consolidated results of their operations and their cash flows for each of the years in the two-year period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America.

/s/ EisnerAmper LLP
New York, New York
March 15, 2016

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
($ in thousands except for share and per share amounts)

	December 31, 2016	December 31, 2015
ASSETS		
Current assets		
Cash and cash equivalents	$ 88,294	$ 98,182
Accounts receivable	1,830	-
Cash deposits with clearing organizations	1,030	-
Receivables from broker-dealers and clearing organizations	3,357	-
Forgivable loans receivable	1,712	-
Securities owned, at fair value	2,357	-
Inventory	203	-
Other receivables - related party	1,790	156
Prepaid expenses and other current assets	9,061	1,599
Total current assets	109,634	99,937
Property and equipment, net	7,376	309
Restricted cash	15,860	14,586
Long-term investments, at fair value	1,414	2,485
Intangible asset - license	17,408	1,250
Goodwill	18,645	-
Other assets	394	43
Total assets	**$ 170,731**	**$ 118,610**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	$ 24,295	$ 10,438
Accrued commissions and payroll payable	11,940	-
Deferred clearing and marketing credits	995	-
Securities sold, not yet purchased, at fair value	298	-
Warrants issuable - National	14,359	-
Interest payable	88	27
Interest payable - related party	77	-
Notes payable, short-term	1,000	-
Subsidiary convertible note, short-term, at fair value	1,031	-
Contingently issuable liabilities	1,682	-
Derivative warrant liability	481	114
Other current liabilities	319	-
Total current liabilities	56,565	10,579
Notes payable, long-term (net of debt discount of $2,009 and $835 at December 31, 2016 and December 31, 2015, respectively)	22,528	23,174
Subsidiary convertible note, long-term, at fair value	3,656	-
Other long-term liabilities	5,014	584
Total liabilities	**87,763**	**34,337**
Commitments and contingencies		
Stockholders' equity		
Convertible Preferred stock, $.001 par value, 129,767 Series C shares authorized, 0 shares issued and outstanding as of December 31, 2016 and December 31, 2015, respectively	-	-
Common Stock, $.001 par value, 100,000,000 shares authorized, 48,932,023 and 47,147,032 shares issued and outstanding as of December 31, 2016 and December 31, 2015, respectively	49	47
Additional paid-in-capital	283,697	246,955
Accumulated deficit	(245,251)	(190,156)
Total stockholders' equity attributed to the Company	38,495	56,846
Non-controlling interests	44,473	27,427
Total stockholders' equity	82,968	84,273
Total liabilities and stockholders' equity	**$ 170,731**	**$ 118,610**

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

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Operations
($ in thousands except for share and per share amounts)

	For the Years Ended December 31,		
	2016	**2015**	**2014**
Revenue			
Fortress			
Product revenue, net	$ 3,587	$ 273	$ -
Revenue - from a related party	2,570	590	-
Total Fortress revenue	6,157	863	-
National			
Commissions	5,388	-	-
Net dealer inventory gains	253	-	-
Investment banking	2,829	-	-
Investment advisory	904	-	-
Interest and dividends	155	-	-
Transfer fees and clearing services	386	-	-
Tax preparation and accounting	338	-	-
Other	70	-	-
Total National revenue	10,323	-	-
Total revenue	16,480	863	-
Operating expenses			
Fortress			
Cost of goods sold – product revenue	790	-	-
Research and development	29,602	18,402	10,239
Research and development – licenses acquired	5,532	11,408	-
General and administrative	34,003	21,584	10,413
Total Fortress operating expenses	69,927	51,394	20,652
National			
Commissions, compensation and fees	10,414	-	-
Clearing fees	144	-	-
Communications	177	-	-
Occupancy	193	-	-
Licenses and registration	147	-	-
Professional fees	327	-	-
Interest	1	-	-
Depreciation and amortization	545	-	-
Other administrative expenses	315	-	-
Total National operating expenses	12,263	-	-
Total operating expenses	82,190	51,394	20,652
Loss from operations	(65,710)	(50,531)	(20,652)
Other income (expenses)			
Interest income	298	245	662
Interest expense and financing fee	(3,690)	(1,484)	(1,338)
Change in fair value of derivative liabilities	(1,039)	(438)	-
Change in fair value of subsidiary convertible note	(78)	-	-
Change in fair value of investments	(1,071)	(1,675)	942
Total other expenses	(5,580)	(3,352)	266
Net loss	**(71,290)**	**(53,883)**	**(20,386)**
Less: net loss attributable to non-controlling interests	16,195	5,455	-
Net loss attributable to common stockholders	**$ (55,095)**	**$ (48,428)**	**$ (20,386)**
Basic and diluted net loss per common share	$ (1.38)	$ (1.24)	$ (0.56)
Weighted average common shares outstanding—basic and diluted	39,962,657	39,146,589	36,323,596

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

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Changes in Stockholders' Equity
($ in thousands except for share amounts)

	Common Stock		Additional Paid-In	Accumulated	Non-Controlling	Total Stockholders'
	Shares	Amount	Capital	Deficit	Interests	Equity
Balance at December 31, 2013	**39,652,950**	**$ 40**	**$ 202,580**	**$ (121,342)**	**$ -**	**$ 81,278**
Exercise of stock options	323,412	-	596	-	-	596
Issuance of Common Stock related to subscription	2,175,000	2	3,500	-	-	3,502
Issuance of Common Stock under ESPP	13,980	-	19	-	-	19
Common Stock issuance costs	-	-	(32)	-	-	(32)
Issuance of Restricted Stock	4,328,692	4	(4)	-	-	-
Stock-based compensation expense	-	-	5,546	-	-	5,546
Net loss	-	-	-	(20,386)	-	(20,386)
Balance at December 31, 2014	**46,494,034**	**46**	**212,205**	**(141,728)**	**-**	**70,523**
Exercise of options	100,000	-	216	-	-	216
Stock-based compensation expense	-	-	14,291	-	-	14,291
Issuance of restricted stock	525,000	1	(1)	-	-	-
Subsidiary's offering, net	-	-	51,496	-	-	51,496
Issuance of common stock under ESPP	27,998	-	59	-	-	59
Issuance of subsidiaries' common shares for license expenses	-	-	958			958
Issuance of warrants in conjunction with NSC debt	-	-	613	-	-	613
Non-controlling interest in subsidiaries	-	-	(32,882)	-	32,882	-
Net loss attributable to non-controlling interest	-	-	-	-	(5,455)	(5,455)
Net loss attributable to common stockholders	-	-	-	(48,428)	-	(48,428)
Balance at December 31, 2015	**47,147,032**	**47**	**246,955**	**(190,156)**	**27,427**	**84,273**
Stock-based compensation expense	-	-	12,128	-	-	12,128
Issuance of restricted stock	1,568,408	2	(2)	-	-	-
Cashless exercise of warrants	12,633	-	-	-	-	-
Subsidiary's offering, net	-	-	36,818	-	-	36,818
Issuance of subsidiaries' common shares for license expenses	-	-	53	-	-	53
Issuance of common stock for at-the-market offering	150,556	-	434	-	-	434
At-the-market offering cost	-	-	(79)	-	-	(79)
Issuance of common stock under ESPP	86,727	-	189	-	-	189
Cancellation of restricted stock	(33,333)	-	-	-	-	-
Beneficial conversion feature of Opus Credit Facility	-	-	2,006	-	-	2,006
Issuance of warrants in conjunction with NSC debt	-	-	793	-	-	793
Non-controlling interest in subsidiaries	-	-	(15,598)	-	15,598	-
Non-controlling interest in National Holdings Corp.	-	-	-	-	17,643	17,643
Net loss attributable to non-controlling interest	-	-	-	-	(16,195)	(16,195)
Net loss attributable to common stockholders	-	-	-	(55,095)	-	(55,095)
Balance at December 31, 2016	**48,932,023**	**$ 49**	**$ 283,697**	**$ (245,251)**	**$ 44,473**	**$ 82,968**

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

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
($ in thousands)

	For the Years Ended December 31,		
	2016	**2015**	**2014**
Cash Flows from Operating Activities:			
Net Loss	$ (71,290)	$ (53,883)	$ (20,386)
Reconciliation of net loss to net cash used in operating activities:			
Depreciation and amortization expense	944	26	23
Noncash interest expense	-	167	634
Amortization of debt discount	1,466	314	-
Amortization of product revenue license fee	183	-	-
Amortization of forgivable loans to registered representatives	176	-	-
Amortization of deferred clearing credit	(13)	-	-
Stock-based compensation expense	12,128	14,291	5,546
Recovery for doubtful accounts	(47)	-	-
Deferred tax benefit	(73)	-	-
Issuance of subsidiaries' common shares for license expenses	53	958	-
Common shares issuable for license expenses	1,682	-	-
Financing fees on subsidiaries' Convertible Note, at fair value	1,032	-	-
Change in fair value of investments	1,071	1,675	(942)
Change in fair value of derivative liabilities	1,039	438	-
Change in fair value of subsidiary convertible note	78	-	-
Change in fair value of contingent consideration payable - National	2	-	-
Research and development-licenses acquired, expense	3,785	10,448	-
Asset impairment loss	-	-	722
Increase (decrease) in cash and cash equivalents resulting from changes in operating assets and liabilities:			
Accounts receivable	(1,830)	-	-
Receivables from broker-dealers and clearing organizations	(4,048)	-	-
Forgivable loans receivable	(84)	-	-
Securities owned, at fair value	(179)	-	-
Inventory	(203)	-	-
Other receivables - related party	(1,634)	(156)	(15)
Prepaid expenses and other current assets	(204)	(739)	(124)
Restricted cash	(1)	-	-
Other assets	(12)	-	-
Accounts payable and accrued expenses	5,395	5,889	(849)
Securities sold, but not yet purchased, at fair value	298	-	-
Interest payable	61	(1)	(81)
Interest payable - related party	66	-	-
End of term fee associated with Hercules Note	-	-	(398)
Other long-term liabilities	4,346	195	(464)
Net cash used in operating activities	(45,813)	(20,378)	(16,334)
Cash Flows from Investing Activities:			
Purchase of marketable securities, at fair value	-	(79,947)	(20,002)
Sale of marketable securities	-	99,949	-
Purchase of short- term investment	-	-	(346)
Purchase of long-term investment	-	-	(2,925)
Purchase of research and development licenses	(3,785)	(10,448)	-
Purchase of property and equipment	(6,370)	(283)	-
Purchase of license	(350)	(1,250)	-
Security deposits paid	(6)	-	-
Security deposits refund	-	22	-
Net cash acquired in acquisition of National Holdings Corp.	4,626	-	-
Investment in Origo Acquisition Corp.	(175)	(158)	-
Net cash (used in) provided by investing activities	(6,060)	7,885	(23,273)

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

FORTRESS BIOTECH, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows (Continued)
($ in thousands)

	For the Years Ended December 31,		
	2016	**2015**	**2014**
Cash Flows from Financing Activities:			
Payment of Hercules Note	-	-	(13,654)
Proceeds from exercise of stock options	-	216	596
Proceeds from issuance of common stock under ESPP	189	59	19
Proceeds from issuance of common stock	-	-	3,502
Payment of costs related to the issuance of common stock	-	-	(32)
Proceeds from subsidiary's offering	39,662	57,817	-
Payment of costs related to subsidiary's offering	(2,844)	(6,321)	-
Proceeds from at-the-market offering	434	-	-
Payment of cost related to at-the-market offering	(79)	-	-
Payment of NSC note	(6,392)	-	-
Proceeds from NSC note	-	10,000	-
Payment of debt issuance costs associated with NSC Note	-	(855)	-
Proceeds from IDB note	920	-	14,009
Payment of debt issue costs associated with IDB Note	-	-	(9)
Proceeds from Helocyte Convertible Note	4,409	-	-
Payment of debt issuance costs associated with Helocyte Convertible Note	(535)	-	-
Proceeds from Avenue Convertible Note	200	-	-
Payment of debt issuance costs associated with Avenue Convertible Note	(59)	-	-
Proceeds from Opus Credit Facility	7,000	-	-
Transfer of restricted cash	(920)	-	(14,586)
Net cash provided by financing activities	41,985	60,916	(10,155)
Net (decrease) increase in cash and cash equivalents	(9,888)	48,423	(49,762)
Cash and cash equivalents at beginning of period	98,182	49,759	99,521
Cash and cash equivalents at end of period	$ 88,294	$ 98,182	$ 49,759
Supplemental disclosure of cash flow information:			
Cash paid for interest	$ 349	$ 80	$ 785
Supplemental disclosure of non-cash financing and investing activities:			
Issuance of restricted stock	$ 2	$ 1	$ 4
Issuance of warrant liabilities in conjunction with NSC debt	$ 634	$ 114	$ -
Issuance of warrants in conjunction with NSC debt	$ 793	$ 175	$ -
Beneficial conversion feature related to Opus Credit Facility	$ 2,006	$ -	$ -
Acquisition of National Holdings Corp.			
Goodwill	$ (18,645)	$ -	$ -
Intangible assets - trademark	(3,000)		
Intangible assets - customer list	(13,500)		
Accounts receivable	(4,889)	-	-
Cash deposits with clearing organizations	(1,030)	-	-
Receivables from broker-dealers and clearing organizations	(1,607)	-	-
Securities owned, at fair value	(2,178)	-	-
Prepaid expenses and other current assets	(1,985)	-	-
Property and equipment, net	(1,132)	-	-
Restricted cash	(353)	-	-
Accounts payable and accrued expenses	6,079	-	-
Accrued commissions and payroll payable	14,029	-	-
Deferred clearing and marketing credits	1,007	-	-
Warrants issuable	13,406		
Other current liabilities	707		
Non-controlling interests	17,717	-	-
Net cash acquired in acquisition of National Holdings Corp.	$ 4,626	$ -	$ -

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

1. Organization and Description of Business

Fortress Biotech, Inc. ("Fortress" or the "Company") is a biopharmaceutical company dedicated to acquiring, developing and commercializing novel pharmaceutical and biotechnology products. Fortress develops and commercializes products both within Fortress and through certain of our subsidiary companies, also referred to herein as the "Fortress Companies." Additionally, the Company recently acquired a controlling interest in National Holdings Corporation, a diversified independent brokerage company (together with its subsidiaries, herein referred to as "NHLD" or "National"). In addition to its internal development programs, the Company leverages its biopharmaceutical business expertise and drug development capabilities and provides funding and management services to help the Fortress Companies achieve their goals. The Company and the Fortress Companies may seek licensings, acquisitions, partnerships, joint ventures and/or public and private financings (including financings facilitated by NHLD) to accelerate and provide additional funding to support their research and development programs.

As of December 31, 2016, in addition to NHLD, the Company has several consolidated Fortress Companies, some of which contain product licenses, including Avenue Therapeutics, Inc. (" Avenue"), Cellvation, Inc. ("Cellvation"), Journey Medical Corporation ("Journey" or "JMC"), Coronado SO Co. ("Coronado SO"), Checkpoint Therapeutics, Inc. ("Checkpoint"), Mustang Bio, Inc. ("Mustang"), Helocyte, Inc. ("Helocyte"), Escala Therapeutics, Inc. ("Escala"), and CB Securities Corporation (which holds investments classified as cash and cash equivalents in 2015). Caelum Biosciences, Inc. ("Caelum") and Cyprium Biosciences, Inc. ("Cyprium"), both consolidated Fortress Companies that hold product licenses, were formed in January 2017 and March 2017, respectively. In addition to the foregoing companies, Fortress also maintains ownership positions in subsidiaries with minimal activity, including Innmune Limited.

National

On September 9, 2016, the Company, purchased approximately 56.6% of NHLD's common stock, par value $0.02 per share, at the purchase price of $3.25 per share in cash for a total purchase price of approximately $22.9 million.

2. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The Company's consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). The Company's consolidated financial statements include the accounts of the Company and the accounts of the Company's subsidiaries: National and its subsidiaries, Innmune Limited, Coronado SO, Cyprium Therapeutics, Inc., Escala, Journey, CB Securities Corporation, Avenue, Checkpoint, Mustang, Caelum, Cellvation and Helocyte. All intercompany balances and transactions have been eliminated.

The accompanying consolidated financial statements include the accounts of the Company's subsidiaries. For consolidated entities where the Company owns less than 100% of the subsidiary, the Company records net loss attributable to non-controlling interests in its consolidated statements of operations equal to the percentage of the economic or ownership interest retained in such entities by the respective non-controlling parties. The Company also consolidates subsidiaries in which it owns less than 50% of the subsidiary but maintains voting control.

The National assets acquired and liabilities assumed and revenues and expenses are reported on a one quarter lag. Therefore, the National assets acquired and liabilities assumed included in these consolidated financial statements as of December 31, 2016 are actually the assets acquired and liabilities assumed as of September 30, 2016 and the revenues and expenses included in these consolidated financial statements for the year ended December 31, 2016 are actually the revenues and expenses for the period from September 10, 2016 through September 30, 2016.

Use of Estimates

The Company's consolidated financial statements include certain amounts that are based on management's best estimates and judgments. The Company's significant estimates include, but are not limited to, useful lives assigned to long-lived assets, fair value of stock options and warrants, stock-based compensation, common stock issued to acquire licenses, investments, accrued expenses, provisions for income taxes and contingencies. Due to the uncertainty inherent in such estimates, actual results may differ from these estimates.

Fair Value Measurement

The Company follows accounting guidance on fair value measurements for financial assets and liabilities measured at fair value on a recurring basis. Under the accounting guidance, fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability.

The accounting guidance requires fair value measurements be classified and disclosed in one of the following three categories:

Level 1: Quoted prices in active markets for identical assets or liabilities.
Level 2: Observable inputs other than Level 1 prices for similar assets or liabilities that are directly or indirectly observable in the marketplace.
Level 3: Unobservable inputs which are supported by little or no market activity and that are financial instruments whose values are determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which the determination of fair value requires significant judgment or estimation.

The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Assets and liabilities measured at fair value are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement in its entirety requires management to make judgments and consider factors specific to the asset or liability.

Certain of the Company's financial instruments are not measured at fair value on a recurring basis, but are recorded at amounts that approximate their fair value due to their liquid or short-term nature, such as accounts payable, accrued expenses and other current liabilities. The carrying value of the amount owed to Ovamed GmbH ("Ovamed") upon the acquisition of certain manufacturing rights has been recorded at its net present value, which approximates its fair value, due to the short-term nature of the liability. The amounts due to Ovamed are included in current liabilities at December 31, 2016 and 2015 in the Consolidated Balance Sheets (see Note 12). Debt carried at cost approximates fair value.

Segment Reporting

Consistent with the increase in Journey's operations as of April 1, 2016 and the investment in National as of September 9, 2016, the Company now operates in three operating and reportable segments, Dermatology Product Sales, Pharmaceutical and Biotechnology

Product Development and National. Intercompany revenue at National related to the Mustang raise of $1.3 million was eliminated. The Company evaluates the performance of each segment based on operating profit or loss. There is no inter-segment allocation of interest expense and income taxes.

Cash and Cash Equivalents

The Company considers highly liquid investments with a maturity of three months or less when purchased to be cash equivalents. Cash and cash equivalents at December 31, 2016 and at December 31, 2015 consisted of cash, money market funds and certificates of deposit in institutions in the United States. Balances at certain institutions have exceeded Federal Deposit Insurance Corporation insured limits and U.S. government agency securities.

Property and Equipment

Office equipment is recorded at cost and depreciated using the straight-line method over the estimated useful life of each asset. Leasehold improvements are amortized over the shorter of the estimated useful lives or the term of the respective leases.

Impairment of Long-Lived Assets

The Company reviews long-lived assets, including property and equipment, for impairment whenever events or changes in business circumstances indicate that the carrying amount of the assets may not be fully recoverable. Factors that the Company considers in deciding when to perform an impairment review include significant underperformance of the business in relation to expectations, significant negative industry or economic trends, and significant changes or planned changes in the use of the assets. If an impairment review is performed to evaluate a long-lived asset for recoverability, the Company compares forecasts of undiscounted cash flows expected to result from the use and eventual disposition of the long-lived asset to its carrying value. An impairment loss would be recognized when estimated undiscounted future cash flows expected to result from the use of an asset are less than its carrying amount. The impairment loss would be based on the excess of the carrying value of the impaired asset over its fair value, determined based on discounted cash flows. During the year ended December 31, 2014, in connection to the abandonment of its lease in Woburn, MA, the Company recorded an impairment loss of $0.4 million related to the write-off of its construction in progress long-lived asset.

Restricted Cash

The Company records cash held in trust or pledged to secure certain debt obligations as restricted cash. As of December 31, 2016 and 2015, the Company has $15.9 million and $14.6 million, respectively of restricted cash collateralizing a note payable of $14.9 million and $14.0 million, respectively and a pledge to secure a letter of credit in connection with an office lease of $0.6 million in both 2016 and 2015.

Inventories

Inventories comprise finished goods, which are valued at the lower of cost or market, on a first-in, first-out basis. The Company evaluates the carrying value of inventories on a regular basis, taking into account anticipated future sales compared with quantities on hand, and the remaining shelf life of goods on hand.

Accounts Receivable

Accounts receivable consists of amounts due to the Company for product sales from JMC. The Company's accounts receivable reflects discounts for estimated early payment and for product estimated returns. Accounts receivable are stated at amounts due from customers, net of an allowance for doubtful accounts. Accounts that are outstanding longer than the contractual payment terms are considered past due. The Company determines its allowance for doubtful accounts by considering a number of factors, including the length of time trade accounts receivable are past due and the customer's current ability to pay its obligation to the Company. The Company writes off accounts receivable when they become uncollectible. Accounts receivable are net of allowance for doubtful accounts of nil and nil, at December 31, 2016 and December 31, 2015, respectively.

Investments at Fair Value

The Company elects the fair value option for its long-term investments at fair value (see Note 7). The decision to elect the fair value option, which is irrevocable once elected, is determined on an instrument by instrument basis and applied to an entire instrument. The net gains or losses, if any, on an investment for which the fair value option has been elected are recognized as a change in fair value of investments on the Consolidated Statements of Operations.

The Company has various processes and controls in place to ensure that fair value is reasonably estimated. While the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

Fair Value Option

As permitted under the Financial Accounting Standards Board ("FASB"), Accounting Standards Codification ("ASC") 825, *Financial Instruments,* ("ASC 825"), the Company has elected the fair value option to account for the Helocyte and Avenue convertible notes that were issued during 2016. In accordance with ASC 825, the Company records these convertible notes at fair value with changes in fair value recorded in the Consolidated Statement of Operations. As a result of applying the fair value option, direct costs and fees related to the Helocyte and Avenue convertible notes were recognized in earnings as incurred and were not deferred.

Accounting for Warrants at Fair Value

The Company classifies as liabilities any contracts that (i) require net-cash settlement (including a requirement to net-cash settle the contract if an event occurs and if that event is outside the control of the Company) or (ii) give the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement).

The fair value of warrants that include price protection reset provision features are deemed to be "down-round protection" and, therefore, do not meet the scope exception for treatment as a derivative under ASC 815, *Derivatives and Hedging*, since "down-round protection" is not an input into the calculation of the fair value of warrants and cannot be considered "indexed to the Company's own stock" which is a requirement for the scope exception as outlined under ASC 815. The accounting treatment of derivative financial instruments requires that the Company record the warrants at their fair values as of the inception date of the agreement and at fair value as of each subsequent balance sheet date. Any change in fair value is recorded as non-operating, non-cash income or expense for each reporting period at each balance sheet date. The Company reassesses the classification of its derivative instruments at each balance sheet date. If the classification changes as a result of events during the period, the contract is reclassified as of the date of the event that caused the reclassification.

The Company assessed the classification of warrants issued, in connection with the Helocyte and Avenue convertible note financings in 2016 (the "Helocyte and Avenue Warrants"), and determined that the Helocyte and Avenue Warrants met the criteria for liability classification. Accordingly, the Company classified the Helocyte and Avenue Warrants as a liability at their fair value and adjusts the instruments to fair value at each balance sheet date until the warrants are exercised or expired. Any change in the fair value of the Helocyte and Avenue Warrants is recognized as "change in the fair value of warrant liabilities" in the Consolidated Statements of Operations.

Opus Credit Facility, with Detachable Warrants

The Company accounts for the Opus Credit Facility with detachable warrants in accordance with ASC 470, *Debt.* The Company assessed the classification of its common stock purchase warrants as of the date of the transaction and determined that such instruments meet the criteria for equity classification. The warrants are reported on the Consolidated Balance Sheets as a component of additional paid in capital within stockholders' equity.

The Company recorded the related issue costs and value ascribed to the warrants as a debt discount of the Opus Credit Facility. The discount is amortized utilizing the effective interest method over the term of the Opus Credit Facility. The unamortized discount, if any, upon repayment of the Opus Credit Facility will be expensed to interest expense. In accordance with ASC Subtopic 470-20, the Company determined the weighted average effective interest rate of the debt was approximately 39%. The Company has also evaluated the Opus Credit Facility and warrants in accordance with the provisions of ASC 815, *Derivatives and Hedging*, including consideration of embedded derivatives requiring bifurcation.

Issuance of Debt and Equity

The Company issues complex financial instruments which include both equity and debt features. The Company analyzes each instrument under ASC 480, *Distinguishing Liabilities from Equity,* ASC 815, *Derivatives and Hedging* and, ASC 470, *Debt*, in order to establish whether such instruments include any embedded derivatives.

Valuation of Warrants Related to NSC Note

In accordance with ASC 815, the Company classified the fair value of the warrants granted in connection with the NSC Note transferred to Avenue effective February 2015 (the "Contingently Issuable Warrants") as a derivative liability. The Company valued these Contingently Issuable Warrants using an option pricing model and used estimates for an expected dividend yield, a risk-free interest rate, and expected volatility together with management's estimate of the probability of issuance of the Contingently Issuable Warrants. At each reporting period, as long as the Contingently Issuable Warrants are potentially issuable and there is a potential for an insufficient number of authorized shares available to settle the Contingently Issuable Warrants, these Contingently Issuable Warrants will be revalued, and any difference from the previous valuation date will be recognized as a change in fair value of derivative liabilities in the Consolidated Statements of Operations.

Recognizing Assets Acquired and Liabilities Assumed in a Business Combination

Acquired assets and assumed liabilities are recognized in a business combination on the basis of their fair values at the date of acquisition. The Company assesses fair value, which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, using a variety of methods including income approaches such as present value techniques or cost approaches such as the estimation of current selling prices and replacement values. Fair value of the assets acquired and liabilities assumed, including intangible assets, are measured based on the assumptions and estimations with regards to the variable factors such as the amount and timing of future cash flows for the asset or liability being measured, appropriate risk-adjusted discount rates, nonperformance risk, or other factors that market participants would consider. Upon acquisition, the Company determines the estimated economic lives of the acquired intangible assets for amortization purposes, which are based on the underlying expected cash flows of such assets.

Goodwill, Intangible Assets and Long Lived Assets

Goodwill represents the excess acquisition cost over the fair value of net tangible and intangible assets acquired. Goodwill is not amortized and is subject to annual impairment testing on October 1st or between annual tests if an event or change in circumstance occurs that would more likely than not reduce the fair value of a reporting unit below its carrying value. In testing for goodwill impairment, the Company has the option to first assess qualitative factors to determine whether the existence of events or circumstances lead to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events and circumstances, the Company concludes that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is not required. If the Company concludes otherwise, it is required to perform the two-step impairment test. The goodwill impairment test is performed at the reporting unit level by comparing the estimated fair value of a reporting unit with its respective carrying value. If the estimated fair value exceeds the carrying value, goodwill at the reporting unit level is not impaired. If the estimated fair value is less than carrying value, further analysis is necessary to determine the amount of impairment, if any, by comparing the implied fair value of the reporting unit's goodwill to the carrying value of the reporting unit’s goodwill.

The fair value of reporting units is based on widely accepted valuation techniques that the Company believes market participants would use, although the valuation process requires significant judgment and often involves the use of significant estimates and assumptions. The methodologies the Company utilizes in estimating the fair value of reporting units include market valuation methods that incorporate price-to-earnings and price-to-book multiples of comparable exchange traded companies and multiples of merger and acquisitions of similar businesses. The estimates and assumptions used in determining fair value could have a significant effect on whether or not an impairment charge is recorded and the magnitude of such a charge. Adverse market or economic events could result in impairment charges in future periods.

Intangible assets deemed to have finite lives are amortized on a straight line basis over their estimated useful lives, where the useful life is the period over which the asset is expected to contribute directly, or indirectly, to its future cash flows. Intangible assets are reviewed for impairment on an interim basis when certain events or circumstances exist. For amortizable intangible assets, impairment exists when the carrying amount of the intangible asset exceeds its fair value. At least annually, the remaining useful life is evaluated.

An intangible asset with an indefinite useful life is not amortized but assessed for impairment annually, or more frequently, when events or changes in circumstances occur indicating that it is more likely than not that the indefinite-lived asset is impaired. Impairment exists when the carrying amount exceeds its fair value. In testing for impairment, the Company has the option to first perform a qualitative assessment to determine whether it is more likely than not that an impairment exists. If it is determined that it is not more likely than not that an impairment exists, a quantitative impairment test is not necessary. If the Company concludes otherwise, it is required to perform a quantitative impairment test. To the extent an impairment loss is recognized, the loss establishes the new cost basis of the asset that is amortized over the remaining useful life of that asset, if any. Subsequent reversal of impairment losses is not permitted.

Long-lived assets, primarily fixed assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets might not be recoverable. The Company will perform a periodic assessment of assets for impairment in the absence of such information or indicators. Conditions that would necessitate an impairment assessment include a significant decline in the observable market value of an asset, a significant change in the extent or manner in which an asset is used, or a significant adverse change that would indicate that the carrying amount of an asset or group of assets is not recoverable. For long-lived assets to be held and used, the Company would recognize an impairment loss only if its carrying amount is not recoverable through its undiscounted cash flows and measures the impairment loss based on the difference between the carrying amount and estimated fair value.

Deferred Financing Costs

Financing costs incurred in connection with the note in favor of National Securities Corporation’s NSC Biotech Venture Fund I LLC (the “NSC Note”) are recorded as a reduction of principal balance due to ASU No. 2015-3 and are amortized over the appropriate expected life based on the term of the NSC Note using the effective interest rate method.

Revenue Recognition

The Company recognizes revenue for the performance of services or the shipment of products when each of the following four criteria is met: (i) persuasive evidence of an arrangement exists; (ii) products are delivered or as services are rendered; (iii) the sales price is fixed or determinable; and (iv) collectability is reasonably assured.

Collaborative Arrangements

Checkpoint is paid by TGTX, a related party, a share of the cost of the license and future milestone payments that are payable to Dana-Farber Cancer Institute pursuant to the license agreement (see Note 8). Checkpoint is also paid by TGTX for the Sponsored Research Agreement between Checkpoint and NeuPharma (see Note 8). The gross amounts of these payments are reported as revenue in the accompanying Statements of Operations. Checkpoint acts as a principal, bears credit risk and may perform part of the services required in the transactions. Consistent with ASC 605-45-15 *Revenue Recognition - Principal Agent Considerations*, these payments are treated as revenue to Checkpoint. The actual expenses creating the payments by TGTX are reflected as research and development expenses.

The Company follows ASC 605-25, *Revenue Recognition - Multiple-Element Arrangements* ("ASC 605-25") and ASC 808, *Collaborative Arrangements*, if applicable, to determine the recognition of revenue under its collaborative research agreements, options to enter into collaborative research agreements and development and commercialization agreements. The terms of these agreements generally contain multiple elements, or deliverables, which may include (i) grants of licenses, or options to obtain licenses, to the Company's intellectual property, (ii) research and development services, (iii) drug product manufacturing, and/or (iv) participation on joint research and/or joint development committees. The payments the Company may receive under these arrangements typically include one or more of the following: non-refundable, up-front license fees; funding of research and/or development efforts; amounts due upon the achievement of specified objectives; and/or royalties on future product sales.

ASC 605-25 provides guidance relating to the separability of deliverables included in an arrangement into different units of accounting and the allocation of arrangement consideration to the units of accounting. The evaluation of multiple-element arrangements requires management to make judgments about (i) the identification of deliverables, (ii) whether such deliverables are separable from the other aspects of the contractual relationship, (iii) the estimated selling price of each deliverable, and (iv) the expected period of performance for each deliverable.

To determine the units of accounting under a multiple-element arrangement, management evaluates certain separation criteria, including whether the deliverables have stand-alone value, based on the relevant facts and circumstances for each arrangement. Management then estimates the selling price for each unit of accounting and allocates the arrangement consideration to each unit utilizing the relative selling price method. The allocated consideration for each unit of accounting is recognized over the related obligation period in accordance with the applicable revenue recognition criteria.

If there are deliverables in an arrangement that are not separable from other aspects of the contractual relationship, they are treated as a combined unit of accounting, with the allocated revenue for the combined unit recognized in a manner consistent with the revenue recognition applicable to the final deliverable in the combined unit. Payments received prior to satisfying the relevant revenue recognition criteria are recorded as deferred revenue in the Consolidated Balance Sheets and recognized as revenue in the Consolidated Statements of Operations when the related revenue recognition criteria are met.

Revenue Recognition – Milestone Method

The Company follows ASC 605-28, *Revenue Recognition-Milestone Method* to evaluate whether each milestone under a license agreement is substantive. This evaluation includes an assessment of whether (i) the consideration is commensurate with either (a) the entity's performance to achieve the milestone, or (b) the enhancement of the value of the delivered item as a result of a specific outcome resulting from the entity's performance to achieve the milestone, (ii) the consideration relates solely to past performance and (iii) the consideration is reasonable relative to all of the deliverables and payment terms within the arrangement. In making this assessment the Company evaluates factors such as the preclinical, clinical, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required and whether the milestone consideration is reasonable relative to all deliverables and payment terms in the arrangement in making this assessment. If a substantive milestone is achieved, the Company would recognize revenue related to the milestone in its entirety in the period in which the milestone was achieved, assuming all other revenue recognition criteria were met. Commercial milestones would be accounted for as royalties and recorded as revenue upon achievement of the milestone, assuming all other revenue recognition criteria were met.

JMC Product Revenue

JMC sells its products directly to wholesalers and specialty pharmacies. JMC recognizes product sales revenue when delivery has occurred, collectability is reasonably assured, and the price to the buyer is fixed or determinable, (in accordance with the specific contractual terms). Delivery occurs when title has transferred to the customer, and the customer has assumed the risks and rewards of

ownership. Revenue from product sales is recognized net of provisions for estimated cash discounts, allowances, returns, rebates, chargebacks and distribution fees paid to certain of JMC's wholesale customers. JMC establishes these provisions concurrently with the recognition of product sales revenue. JMC offers cash discounts for prompt payment and allowances are recorded at the time of sale.

JMC allows customers to return product within a specified period of time before and after its expiration date. Provisions for returns are estimated based on historical levels for like products from external data sources, taking into account additional available information such as historical return and exchange levels, and inventory levels in the wholesale distribution channel through its partners. Although the company has limited history with these product sales, the Company believes based on its current level of sales that it can make reasonable estimates of returns based upon external data sources. JMC reviews its methodology and adequacy of the provision for returns on a quarterly basis, adjusting for changes in assumptions, historical internal and external results and business practices, as necessary.

JMC's co-promotion revenue for Dermasorb HC is based upon prescription volume over an established baseline.

Research and Development

Research and development costs are expensed as incurred. Advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made. Upfront and milestone payments due to third parties that perform research and development services on the Company's behalf will be expensed as services are rendered or when the milestone is achieved.

Research and development costs primarily consist of personnel related expenses, including salaries, benefits, travel, and other related expenses, stock-based compensation, payments made to third parties for license and milestone costs related to in-licensed products and technology, payments made to third party contract research organizations for preclinical and clinical studies, investigative sites for clinical trials, consultants, the cost of acquiring and manufacturing clinical trial materials, and costs associated with regulatory filings, laboratory costs and other supplies.

In accordance with ASC 730-10-25-1, *Research and Development*, costs incurred in obtaining technology licenses are charged to research and development expense if the technology licensed has not reached commercial feasibility and has no alternative future use. Such licenses purchased by the Company require substantial completion of research and development, regulatory and marketing approval efforts in order to reach commercial feasibility and has no alternative future use. Accordingly, the total purchase price for the licenses acquired during the period was reflected as research and development - licenses acquired on the Consolidated Statements of Operations for the year ended December 31, 2016 and 2015.

Contingencies

The Company records accruals for contingencies and legal proceedings expected to be incurred in connection with a loss contingency when it is probable that a liability has been incurred and the amount can be reasonably estimated.

If a loss contingency is not probable but is reasonably possible, or is probable but cannot be estimated, the nature of the contingent liability, together with an estimate of the range of possible loss if determinable and material, would be disclosed.

Stock-Based Compensation

The Company expenses stock-based compensation to employees over the requisite service period based on the estimated grant-date fair value of the awards and forfeiture rates. For stock-based compensation awards to non-employees, the Company remeasures the fair value of the non-employee awards at each reporting period prior to vesting and finally at the vesting date of the award. Changes in the estimated fair value of these non-employee awards are recognized as compensation expense in the period of change.

The Company estimates the fair value of stock option grants using the Black-Scholes option pricing model or 409A valuations, as applicable. The assumptions used in calculating the fair value of stock-based awards represent management's best estimates and involve inherent uncertainties and the application of management's judgment.

Income Taxes

The Company records income taxes using the asset and liability method. Deferred income tax assets and liabilities are recognized for the future tax effects attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective income tax bases, and operating loss and tax credit carryforwards. The Company establishes a valuation allowance if management believes it is more likely than not that the deferred tax assets will not be recovered based on an evaluation of objective verifiable evidence. For tax positions that are more likely than not of being sustained upon audit, the Company recognizes

the largest amount of the benefit that is greater than 50% likely of being realized. For tax positions that are not more likely than not of being sustained upon audit, the Company does not recognize any portion of the benefit.

Non-Controlling Interests

Non-controlling interests in consolidated entities represent the component of equity in consolidated entities held by third parties. Any change in ownership of a subsidiary while the controlling financial interest is retained is accounted for as an equity transaction between the controlling and non-controlling interests.

Comprehensive Loss

The Company's comprehensive loss is equal to its net loss for all periods presented.

Reclassifications

Certain prior period amounts may have been reclassified to conform to the current year presentation.

National's Summary of Significant Accounting Policies

Principals of Consolidation

The consolidated financial statements include the accounts of National and its wholly owned and majority owned subsidiaries. All significant inter-company accounts and transactions have been eliminated in consolidation.

In addition, National may consolidate entities which meet the definition of a variable interest entity for which National is the primary beneficiary. The primary beneficiary is the party who has the power to direct the activities of a variable interest entity that most significantly impact the entity's economic performance and who has an obligation to absorb losses of the entity or a right to receive benefits from the entity that could potentially be significant to the entity. As of December 31, 2016 and 2015, National did not consolidate any variable interest entities.

Use of Estimates

The preparation of these financial statements in conformity with generally accepted accounting principles 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 the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Revenue Recognition

Commission revenue represents commissions generated by National's financial advisors for their clients' purchases and sales of mutual funds, variable annuities, general securities and other financial products, most of which is paid to the advisors as commissions for initiating the transactions.

Commission revenue is generated from front-end sales commissions that occur at the point of sale, as well as trailing commissions. National recognizes front-end sales commission revenue and related clearing and other expenses on transactions introduced to its clearing brokers on a trade date basis. National also recognizes front-end sales commissions and related expenses on transactions initiated directly between the financial advisors and product sponsors upon receipt of notification from sponsors of the commission earned. Commission revenue also includes 12b-1 fees, and variable product trailing fees, collectively considered as trailing fees, which are recurring in nature. These trailing fees are earned by National based on a percentage of the current market value of clients' investment holdings in trail eligible assets. Because trail commission revenues are generally paid in arrears, management estimates commission revenues earned during each period. These estimates are based on a number of factors including investment holdings and the applicable commission rate and the amount of trail commission revenue received in prior periods. Estimates are subsequently adjusted to actual based on notification from the sponsors of trail commissions earned.

Net dealer inventory gains, which are recorded on a trade-date basis, include realized and unrealized net gains and losses resulting from the National's principal trading activities.

Investment banking revenues consist of underwriting revenues, advisory revenues and private placement fees. Underwriting revenues arise from securities offerings in which National acts as an underwriter and include management fees, selling concessions and underwriting fees, net of related syndicate expenses. Underwriting revenues are recorded at the time the underwriting is completed and the income is reasonably determined. Management estimates National's share of the transaction-related expenses incurred by the syndicate, and recognizes revenues net of such expense. On final settlement, typically within 90 days from the trade date of the transaction, these amounts are adjusted to reflect the actual transaction-related expenses and the resulting underwriting fee.

Investment advisory fees are derived from account management and investment advisory services. These fees are determined based on a percentage of the customers assets under management, may be billed monthly or quarterly and are recognized when earned.

Interest is recorded on an accrual basis and dividends are recorded on the ex-dividend date.

Transfer fees and fees for clearing services, which are recorded on a trade date basis, are principally charged to the broker on customer security transactions.

Tax preparation and accounting fees are recognized upon completion of the services.

Securities

Securities owned and securities sold, but not yet purchased, are recorded at fair value. Authoritative accounting guidance defines fair value, establishes a framework for measuring fair value, and establishes a fair value hierarchy which prioritizes the inputs to valuation techniques. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. A fair value measurement assumes that the transaction to sell the asset or transfer the liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market.

Valuation techniques that are consistent with the market, income or cost approach are used to measure fair value. The fair value hierarchy ranks the quality and reliability of the information used to determine fair values. Financial assets and liabilities carried at fair value are classified and disclosed in one of the following three categories:

Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 Inputs other than quoted market prices that are observable, either directly or indirectly, and reasonably available. Observable inputs reflect the assumptions market participants would use in pricing the asset or liability and are developed based on market data obtained from sources independent of National.

Level 3 Unobservable inputs which reflect the assumptions that National develops based on available information about what market participants would use in valuing the asset or liability.

Deferred Clearing and Marketing Credits

Deferred clearing credit represents a clearing fee rebate from National Financial Services (“NFS”), one of National’s clearing brokers, which is being recognized pro rata as a reduction of clearing charges over the term of the clearing agreement which expires in 2022. At September 30, 2016, the deferred clearing credit amounted to approximately $0.7 million.

Deferred marketing credit represents a marketing rebate from NFS, which is being recognized pro rata as a reduction of marketing expenses over the term of the clearing agreement which expires in 2022. At September 30, 2016, the deferred marketing credit amounted to approximately $0.3 million.

Reimbursement of Expenses

The Company incurs certain costs on behalf of its financial advisors including those for insurance, professional registration, technology and information services and legal services, amongst others, which are charged back to the advisors. It is National’s policy to record the reimbursement as a reduction of the respective operating expense.

Legal Reserves

In the normal course of business, National has been named, from time to time, as a defendant in legal and regulatory proceedings. National is also involved, from time to time, in other exams, investigations and similar reviews (both formal and informal) by governmental and self-regulatory agencies regarding its businesses, certain of which may result in judgments, settlements, fines, penalties or other injunctions.

National recognizes a liability for a contingency in accrued expenses and other liabilities when it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. If the reasonable estimate of a probable loss is a range, the Company accrues the most likely amount of such loss, and if such amount is not determinable, then the Company accrues the minimum in the range as the loss accrual. The determination of the outcome and loss estimates requires significant judgment on the part of management. National believes that any other matters for which it has determined a loss to be probable and reasonably estimable are not material to the consolidated financial statements.

In many instances, it is not possible to determine whether any loss is probable or even possible or to estimate the amount of any loss or the size of any range of loss. National believes that, in the aggregate, the pending legal actions or regulatory proceedings and any other exams, investigations or similar reviews (both formal and informal) should not have a material adverse effect on the consolidated results of operations, cash flows or financial condition. In addition, National believes that any amount that could be reasonably estimated of potential loss or range of potential loss in excess of what has been provided in the consolidated financial statements is not material.

Adoption of Recent Accounting Pronouncements

In April 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs*, which requires debt issuance costs to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation of a debt discount. ASU No. 2015-03 is effective for the interim and annual periods ending after December 15, 2015, with early adoption permitted. As of June 30, 2015, the Company adopted ASU No. 2015-03 and such adoption resulted in debt issuance costs for all periods presented to be reclassified to notes payable, long-term, net.

In August 2015, the FASB issued ASU No. 2015-15, *Interest - Imputation of Interest: Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements*, which clarifies the treatment of debt issuance costs from line-of-credit arrangements after the adoption of ASU No. 2015-03, *Interest - Imputation of Interest: Simplifying the Presentation of Debt Issuance Costs*. In particular, ASU No. 2015-15 clarifies that the SEC staff would not object to an entity deferring and presenting debt issuance costs related to a line-of-credit arrangement as an asset and subsequently amortizing the deferred debt issuance costs ratably over the term of such arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. The Company adopted ASU No. 2015-15 during the second quarter of 2015, and its adoption did not have a material impact on its financial statements.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes*, which requires that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position to simplify the presentation of deferred income taxes. The standard is effective prospectively for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2017, with early adoption permitted. As of December 31, 2016, we elected to early adopt the pronouncement on a prospective basis. Adoption of this amendment did not have an effect on the Company's financial position or results of operations, and prior periods were not retrospectively adjusted.

Recent Accounting Pronouncements

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers, which requires entities to recognize revenue in a way that depicts the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. The new guidance also requires additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The FASB has subsequently issued ASU No. 2016-10, *Revenue from Contracts with Customers* (Topic 606) Identifying Performance Obligations and Licensing to address issues arising from implementation of the new revenue recognition standard. ASU 2014-09 and ASU 2016-10 are effective for interim and annual periods beginning January 1, 2018, and may be adopted earlier, but not before January 1, 2017. The revenue standards are required to be adopted by taking either a full retrospective or a modified retrospective approach. The Company is currently evaluating the impact that ASU 2014-09 and 2010-10 will have on its financial statements and determining the transition method, including the period of adoption that it will apply.

In January 2016, FASB issued ASU 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Liabilities*. ASU No. 2016-01 requires several targeted changes including that equity investments (except those accounted for under the equity method of accounting, or those that result in consolidation of the investee) be measured at fair value with changes in fair value recognized in net income. The new guidance also changes certain disclosure requirements and other aspects of current U.S. GAAP. Amendments are to be applied as a cumulative-effect adjustment to the balance sheet as of the beginning of the fiscal year of adoption. ASU 2016-01 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. Early adoption is not permitted with the exception of certain targeted provisions. The Company is currently evaluating the impact of adoption of ASU 2016-01 on its consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. ASU 2016-02 requires an entity to recognize right-of-use assets and lease liabilities on its balance sheet and disclose key information about leasing arrangements. Lessees and lessors are required to disclose qualitative and quantitative information about leasing arrangements to enable a user of the financial statements to assess the amount, timing and uncertainty of cash flows arising from leases. ASU 2016-02 is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. Early adoption is permitted. The Company is currently in the process of evaluating the impact of adoption of ASU 2016-02 on the consolidated financial statements and related disclosures.

In March 2016, the FASB issued ASU 2016-09, *Compensation-Stock Compensation (Topic 718), Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). Under ASU 2016-09, companies will no longer record excess tax benefits and certain tax deficiencies in additional paid-in capital ("APIC"). Instead, they will record all excess tax benefits and tax deficiencies as income tax expense or benefit in the income statement and the APIC pools will be eliminated. In addition, ASU 2016-09 eliminates the requirement that excess tax benefits be realized before companies can recognize them. ASU 2016-09 also requires companies to present excess tax benefits as an operating activity on the statement of cash flows rather than as a financing activity. Furthermore, ASU 2016-09 will increase the amount an employer can withhold to cover income taxes on awards and still qualify for the exception to liability classification for shares used to satisfy the employer's statutory income tax withholding obligation. An employer with a

statutory income tax withholding obligation will now be allowed to withhold shares with a fair value up to the amount of taxes owed using the maximum statutory tax rate in the employee's applicable jurisdiction(s). ASU 2016-09 requires a company to classify the cash paid to a tax authority when shares are withheld to satisfy its statutory income tax withholding obligation as a financing activity on the statement of cash flows. Under current GAAP, it was not specified how these cash flows should be classified. In addition, companies will now have to elect whether to account for forfeitures on share-based payments by (1) recognizing forfeitures of awards as they occur or (2) estimating the number of awards expected to be forfeited and adjusting the estimate when it is likely to change, as is currently required. These aspects of ASU 2016-09 are effective for reporting periods beginning after December 15, 2016, with early adoption permitted provided that all of the guidance is adopted in the same period. The Company is currently evaluating the impact of ASU 2016-09 on its consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 requires that expected credit losses relating to financial assets are measured on an amortized cost basis and available-for-sale debt securities be recorded through an allowance for credit losses. ASU 2016-13 limits the amount of credit losses to be recognized for available-for-sale debt securities to the amount by which carrying value exceeds fair value and also requires the reversal of previously recognized credit losses if fair value increases. The new standard will be effective on January 1, 2020. Early adoption of ASU 2016-13 will be available on January 1, 2019. The Company is currently evaluating the impact that ASU 2016-13 will have on its consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments,* which addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The standard is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. The Company is currently in the process of evaluating the impact of this new pronouncement on its consolidated statements of cash flows.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows (Topic 230) Restricted Cash*. The new guidance requires that the reconciliation of the beginning-of-period and end-of-period amounts shown in the statement of cash flows include restricted cash and restricted cash equivalents. If restricted cash is presented separately from cash and cash equivalents on the balance sheet, companies will be required to reconcile the amounts presented on the statement of cash flows to the amounts on the balance sheet. Companies will also need to disclose information about the nature of the restrictions. The guidance is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company is currently in the process of evaluating the impact of this new pronouncement on its consolidated statements of cash flows.

In January 2017, the FASB issued an ASU 2017-01, *Business Combinations (Topic 805) Clarifying the Definition of a Business*. The amendments in this update is to clarify the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill, and consolidation. The guidance is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company is currently evaluating the impact of adopting this guidance.

In January 2017, the FASB issued ASU 2017-04, *Intangibles - Goodwill and Other (Topic 350)*: Simplifying the Accounting for Goodwill Impairment. ASU 2017-04 removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. This standard will be effective for the Company beginning in the first quarter of fiscal year 2021 and is required to be applied prospectively. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is currently evaluating the impact this standard will have on its consolidated financial statements.

3. National Holdings Corporation

On September 9, 2016, the Company, purchased approximately 56.6% of National's common stock, par value $0.02 per share at the purchase price of $3.25 per share in cash.

On April 27, 2016, the Company entered into an Agreement and Plan of Merger with National and a wholly owned subsidiary of the Company, providing for the acquisition of National (the "Merger Agreement"). Pursuant to the Merger Agreement, and upon the terms and subject to the conditions described therein, the Company agreed to cause its wholly owned subsidiary to commence a tender offer for all the issued and outstanding shares of National's common stock, par value $0.02 per share, at a purchase price of $3.25 per share (the "Offer"). Upon expiration of the Offer on September 9, 2016 (and the subsequent settlement period), a total of approximately 7 million shares were validly tendered, representing approximately 56% of the outstanding shares of National on a fully-diluted basis. The aggregate consideration paid by Fortress in the Offer was approximately $22.9 million, without giving effect to related transaction fees and expenses. Fortress funded the payment with cash on hand.

The following table summarizes the preliminary fair value of assets acquired and liabilities assumed at the date of the acquisition ($ in thousands):

Assets	
Cash and cash equivalents	$ 27,498
Accounts receivable	4,889
Cash deposits with clearing organizations	1,030
Receivable from brokers, dealers and clearing agencies	1,607
Securities owned, at fair value	2,178
Prepaid expenses and other current assets	1,985
Property and equipment	1,132
Restricted cash	353
Intangible assets - trademark	3,000
Intangible assets - customer list	13,500
Goodwill	18,645
Total assets	75,817
Liabilities	
Accrued compensation payable	$ 14,029
Accounts payable and accrued expenses	6,079
Deferred clearing and marketing credits	1,007
Warrants issuable	13,406
Other current liabilities	707
Total liabilities assumed	35,228
Non-controlling interests	17,717
Net assets acquired	$ 22,872
Cash and cash equivalents from National	$ 27,498
Cash to NHLD Shareholders (Tender Offer)	22,872
Net cash acquired in acquisition of National	$ 4,626

The preliminary estimated fair values of the assets acquired and liabilities assumed will be finalized as further information is received regarding these items and analysis of this information is completed. The Company preliminarily recognized $18.6 million of goodwill and does not expect goodwill to be deductible for tax purposes.

Intangible assets consist of trademark and customer lists acquired in the merger under the purchase method of accounting are recorded at preliminary fair value net of accumulated amortization since the purchase date. Amortization is calculated using the straight-line and accelerated methods over the following estimated useful lives:

	Useful life
Trademark	10 years
Customer lists	10 years

The gross carrying amounts related to acquired intangible assets as of December 31, 2016 are as follows ($ in thousands):

Intangible assets at September 9, 2016	$ 16,500
Amortization expense	(509)
Intangible assets at December 31, 2016	$ 15,991

The future amortization of these intangible assets is as follows ($ in thousands):

	Trademark	**Customer List**	**Total**
Year Ended December 31, 2017	$ 300	$ 1,350	$ 1,650
Year Ended December 31, 2018	300	1,349	1,649
Year Ended December 31, 2019	300	1,349	1,649
Year Ended December 31, 2020	301	1,353	1,654
Year Ended December 31, 2021	300	1,349	1,649
Thereafter	1,407	6,333	7,740
Total	$ 2,908	$ 13,083	$ 15,991

The Company reviews its finite-lived intangible assets for impairment when events or changes in circumstances indicate that the carrying amount of finite-lived intangible asset may not be recoverable. Recoverability of a finite-lived intangible asset is measured by a comparison of its carrying amount to the undiscounted future cash flows expected to be generated by the asset. If the asset is considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the asset exceeds the fair value of the asset. There were no indicators of impairment during the period ended September 30, 2016.

National’s results of operations have not been included in the consolidated financial statements prospectively from the date of acquisition, because we have elected to record National’s financial results in operations under a three-month lag. The following unaudited pro forma financial data assumes the acquisition had occurred at the beginning of January 1, 2015. Pro forma results have been prepared by adjusting the Company’s historical results to include National's results of operations. The unaudited pro forma results presented do not necessarily reflect the results of operations that would have resulted had the acquisition been completed at the beginning of January 1, 2015, nor do they indicate the results of operations in future periods. Additionally, the unaudited pro forma results do not include the impact of possible business model changes, nor do they consider any potential impacts of current market

conditions or revenues, reduction of expenses, asset dispositions, or other factors. The impact of these items could alter the following pro forma results ($ in thousands):

	Year Ended December 31,	
	2016	2015
	(Unaudited)	(Unaudited)
Total revenues	$ 190,556	$ 163,909
Net loss attributable to common stockholders	$ (59,027)	$ (47,310)
Los per share:		
Basic	$ (1.48)	$ (1.21)
Diluted	$ (1.48)	$ (1.21)

4. Broker-Dealers and Clearing Organizations and Other Receivables

At September 30, 2016, National's receivables of $3.4 million from broker-dealers and clearing organizations represent net amounts due for commissions and fees associated with National's retail brokerage business as well as asset based fee revenue associated with National's asset management advisory business. Other receivables at September 30, 2016 of $5.4 million principally represent trailing commissions, tax and accounting fees and investment banking fees and are net of an allowance for uncollectable accounts of $0.7 million.

5. Forgivable Loans Receivable

From time to time, National's operating subsidiaries may make loans, evidenced by promissory notes, primarily to newly recruited independent financial advisors as an incentive for their affiliation. The notes receivable balance is comprised of unsecured non-interest-bearing and interest-bearing loans (interest ranging up to 9%). These notes have various schedules for repayment or forgiveness based on production or retention requirements being met and mature at various dates through 2018. Amortization of loan forgiveness was included in commissions, compensation and fees in the statement of operations. In the event the advisor's affiliation with the subsidiary terminates, the advisor is required to repay the unamortized balance of the note.

National provides an allowance for doubtful accounts on the notes based on historical collection experience and continually evaluates the receivables for collectability and possible write-offs where a loss is deemed probable. As of September 30, 2016, no allowance for doubtful accounts was required.

There were no unamortized forgivable loans outstanding at September 30, 2016 attributable to registered representatives who ended their affiliation with National's subsidiaries prior to the fulfillment of their obligation.

6. Property and Equipment

Fortress' property and equipment, exclusive of National's property and equipment consisted of the following:

		As of December 31,	
($ in thousands)	Useful Life (Years)	2016	2015
Computer equipment	3	$ 440	$ 13
Furniture and fixtures	5	821	69
Leasehold improvements	5 - 15	5,396	21
Construction in progress (1)	NA	–	274
Total property and equipment		6,657	377
Less: Accumulated depreciation		(445)	(68)
Property and equipment, net		$ 6,212	$ 309

(1) For build-out of the Company's new office in New York, NY.

Depreciation expenses of Fortress' s property and equipment for the years ended December 31, 2016, 2015, and 2014 was $0.4 million, $26,000, and $23,000, respectively, and was recorded in both research and development expense and general and administrative expense in the Consolidated Statements of Operations.

National' s property and equipment as of September 30, 2016 consisted of the following ($ in thousands):

	September 30, 2016	Estimated Useful Lives (in years)
Equipment	$ 600	5
Furniture and fixtures	65	5
Leasehold improvements	259	Lesser of useful life or term of lease
Capital Leases (Primarily composed of computer equipment)	276	5
Total property and equipment	1,200	
Less: Accumulated depreciation	(36)	
Property and equipment, net	$ 1,164	

Depreciation expense of National's property and equipment for the period from September 10, 2016 through September 30, 2016 was $36,000.

7. Fair Value Measurements

Certain of the Company's financial instruments are not measured at fair value on a recurring basis but are recorded at amounts that approximate their fair value due to their liquid or short-term nature, such as accounts payable, accrued expenses and other current liabilities.

Laser Device for Treatment of Migraine Headaches

On March 17, 2014, the Company invested $250,000 for a 35% ownership position in a third-party company developing a laser device to treat migraine headaches. The Company elected the fair value option for recording this investment. In conjunction with this investment, the Company entered into a Purchase Agreement with the third-party company, in which the Company received 13,409,962 Class A Preferred Units, representing 83% of a total 16,091,954 Class A Preferred Units. The fair value of this investment was $0.3 million as of December 31, 2016 and 2015. The value of the Company's investment was determined based on a valuation which takes into consideration, when applicable, cash received, cost of the investment, market participant inputs, estimated cash flows based on entity specific criteria, purchase multiples paid in other comparable third-party transactions, market conditions, liquidity, operating results and other qualitative and quantitative factors. The values at which the Company's investments are carried on its books are adjusted to estimated fair value at the end of each quarter taking into account general economic and stock market conditions and those characteristics specific to the underlying investments. Based upon these inputs at December 31, 2016 and 2015, the fair value of the Company's investment approximated cost.

Origo Acquisition Corporation (formerly CB Pharma Acquisition Corporation)

On June 10, 2016, CB Pharma Acquisition Corp ("CB Pharma") held an extraordinary general meeting of shareholders (the "Meeting"). At the Meeting, the shareholders approved each of the following items: (i) an amendment to the CB Pharma's Amended and Restated Memorandum and Articles of Association (the "Charter") to extend the date by which CB Pharma has to consummate a business combination from June 12, 2016 to December 12, 2016 (the "Extension"), (ii) an amendment to the Charter to allow the holders of the CB Pharma's ordinary shares issued in the their initial public offering to elect to convert their shares into their pro rata portion of the funds held in trust, if the Extension is approved, and (iii) the change of CB Pharma's name from "CB Pharma Acquisition Corp." to "Origo Acquisition Corporation" ("Origo"). In connection with the Meeting, the Company transferred 1,050,000 of its CB Pharma ordinary shares to Origo. The Company retained ownership of 265,000 Origo shares.

On December 19, 2016, Origo announced the execution of a Merger Agreement with Aina Le'a Inc., a residential and commercial real estate developer in Hawaii, pursuant to which Origo will merge with and into Aina Le'a Merger Sub, a wholly-owned subsidiary of Aina Le'a Inc. (the "Merger"). Under the Merger, shareholders and warrant holders in Origo will receive 0.6 shares or warrants of Aina's common stock, respectively, for each share or warrant of Origo they hold. On March 10, 2017, Origo's shareholders approved an amendment to Origo's organizational documents extending the date by which Origo must consummate the Merger to September 12, 2017.

As of December 31, 2016, the Company valued its investment in Origo, a publicly traded company, utilizing the following assumptions: probability of a successful business combination of 51.53%, and no dividend rate, which yielded an underlying value of $8.16 per ordinary share for the private placement shares. The rights and warrants were valued utilizing a binomial-lattice model which assumes a volatility of 25.6%, a risk free rate of return of 0.85% and a strike price of $11.50 per share arriving at a value of $0.82 for each right and $0.58 for each warrant. A 51.53% probability of a successful business combination was applied to the values above arriving at an estimated value of $4.20 for the private placement shares, $0.42 for each right and $0.30 for each warrant. Based upon the valuation, the Company recorded a decrease in fair-value of investment of $1.1 million of which $25,000 represents a realized loss on the investment of the ordinary shares and the remaining $1.0 million was recorded as an unrealized loss. At December 31, 2016, the fair value of the Company's investment in Origo was, $1.2 million. The Company's working capital note with Origo of $0.3 million can be converted to stock upon a successful business combination.

Uracil Topical Cream

In April 2014, the Company paid $243,000 for an option to purchase the exclusive rights to a Phase 2, topical product, Uracil Topical Cream, from a third party and paid an additional $50,000 in August 2014 to extend the term of the option for a total purchase price of $0.3 million. The Company elected the fair value option for this investment. On September 30, 2014, the Company recognized a loss of $0.3 million in connection with the expiration of the option. For the year ended December 31, 2014, this loss was reflected in the Consolidated Statements of Operations.

Contingently Issuable Warrant

Pursuant to the Amended NSC Note (see Note 11), if a Fortress Company has the proceeds of the NSC Note transferred to it, such Fortress Company will issue a note to NSC and NSC will also receive a warrant to purchase a number of shares of the Fortress Company's stock equal to 25% of the outstanding Fortress Company note divided by the lowest price for which the Fortress Company sells its equity in its first third party financing. The warrants issued will have a term of 10 years and an exercise price equal to the par value of the Fortress Company's common stock and are accounted for in accordance with ASC 815, *Derivatives and Hedging.*

Avenue classified the fair value of the Contingently Issuable Warrants that may have been granted in connection with Avenue's $3.0 million of its NSC Note transferred from Fortress to Avenue on October 31, 2015 (issuance date) and December 31, 2016 as a derivative liability as there was a potential that Avenue would not have a sufficient number of authorized common shares available to settle these instruments.

The fair value of Avenue's Contingently Issuable Warrants was determined by applying management's estimate of the probability of issuance of the Contingently Issuable Warrants together with an option pricing model, with the following key assumptions:

	December 31, 2016	December 31, 2015
Risk-free interest rate	2.45%	2.27%
Expected dividend yield	-	-
Expected term in years	10.00	9.84
Expected volatility	87%	83%
Probability of issuance of the warrant	50%	25%

($ in thousands)	Avenue's Contingently Issuable Warrants
Beginning balance at January 1, 2016	$ 114
Additions	-
Change in fair value	188
Ending balance at December 31, 2016	$ 302

Mustang classified the fair value of the Contingently Issuable Warrants that may have been granted in connection with Mustang's $3.6 million NSC Note transferred from Fortress to Mustang on July 5, 2016 (issuance date). In October 2016, Mustang issued 138,462 warrants with an exercise price at par. Upon the issuance of warrants, Fortress derecognized a liability related to contingently issuance warrants of $0.8 million.

The fair value of Mustang's Contingently Issuable Warrants was determined by applying management's estimate of the probability of issuance of the Contingently Issuable Warrants together with an option-pricing model, with the following key assumptions:

	Issuance Dates
Risk-free interest rate	1.37%
Expected dividend yield	-
Expected term in years	10.00
Expected volatility	76.70%
Probability of issuance of the warrant	100%

($ in thousands)	Mustang's Contingently Issuable Warrants
Beginning balance at January 1, 2016	$ -
Additions	634
Change in fair value	159
Issuance of Warrants (October 25, 2016)	(793)
Ending balance at December 31, 2016	$ -

On October 30, 2015, Checkpoint issued 139,592 warrants to NSC after an initial closing of Checkpoint's offering on September 30, 2015. The following table sets forth the changes in the estimated fair value for Checkpoint's Level 3 classified derivative Contingently Issuable Warrant liabilities:

($ in thousands)	Checkpoint's Contingently Issuable Warrants
Beginning balance at January 1, 2015	$ -
Additions	175
Change in fair value	438
Issuance of Warrants (October 30, 2015)	(613)
Ending balance at December 31, 2015	$ -

The fair value of Checkpoint's Contingently Issuable Warrants was determined at various issuance dates from March 19, 2015 to August 31, 2015 ("Issuance Dates") for $0.2 million and on October 30, 2015 for $0.6 million by applying management's estimate of the probability of issuance of the Contingently Issuable Warrants together with the option pricing model with the following key assumptions:

	Issuance Dates	**October 30, 2015**
Risk-free interest rate	2.26%	2.16%
Expected dividend yield	-	-
Expected term in years	10.00	10.00
Expected volatility	83%	100.86%
Probability of issuance of the warrant	25%	100%

Avenue Warrant Liabilities

On December 30, 2016, Avenue held a closing of the sale of convertible promissory notes. In the closing, WestPark Capital, Inc., ("WestPark") the placement agent, received a warrant ("WestPark Warrant") to purchase the number of shares of Avenue's common stock equal to $10,000 divided by the price per share at which any note sold to investors first converts into Avenue's common stock. The Avenue Warrant has a ten-year term and has a per share exercise price equal to the price per share at which any note sold to investors first converts into Avenue's common stock. The fair value of Avenue's WestPark Warrant liability was measured at fair value using a Monte Carlo simulation valuation methodology. A summary of the weighted average (in aggregate) significant unobservable inputs (level 3 inputs) used in measuring the Company's warrant liabilities that are categorized within Level 3 of the fair value hierarchy for the year ended December 31, 2016 is as follows:

	December 31, 2016
Risk-free interest rate	2.45%
Expected dividend yield	-
Expected term in years	10.00
Expected volatility	87%

($ in thousands)	**Fair Value of Derivative Warrant Liability**
Beginning balance at January 1, 2016	$ -
Additions	12
Change in fair value of derivative liabilities	-
Ending balance at December 31, 2016	$ 12

Helocyte Warrant Liabilities

The fair value of Helocyte's warrant liability was measured at fair value using a Monte Carlo simulation valuation methodology. A summary of the weighted average (in aggregate) significant unobservable inputs (level 3 inputs) used in measuring the Company's warrant liabilities that are categorized within Level 3 of the fair value hierarchy for the year ended December 31, 2016 is as follows:

	December 31, 2016
Risk-free interest rate	1.82% - 1.91 %
Expected dividend yield	-%
Expected term in years	4.50 – 4.92
Expected volatility	70.0%
Strike price	$0.44

($ in thousands)	**Fair Value of Derivative Warrant Liability**
Beginning balance at January 1, 2016	$ -
Additions	428
Change in fair value of derivative liabilities	(261)
Ending balance at December 31, 2016	$ 167

Convertible Notes at Fair Value

Helocyte's convertible debt is measured at fair value using the Monte Carlo simulation valuation methodology. A summary of the weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring the convertible debt that is categorized within Level 3 of the fair value hierarchy for the year ended December 31, 2016 is as follows:

	December 31, 2016
Risk-free interest rate	0.74% - 1.17 %
Expected dividend yield	-%
Expected term in years	0.75 – 1.91
Expected volatility	61.7%

Avenue's convertible debt is measured at fair value using the Monte Carlo simulation valuation methodology. A summary of the weighted average (in aggregate) significant unobservable inputs (Level 3 inputs) used in measuring the convertible debt that is categorized within Level 3 of the fair value hierarchy for the year ended December 31, 2016 is as follows:

	December 31, 2016
Risk-free interest rate	0.62% - 1.20 %
Expected dividend yield	-%
Expected term in years	0.50 – 2.00
Expected volatility	63.1%

The following tables classify into the fair value hierarchy of Fortress' financial instruments, exclusive of National's financial instruments, measured at fair value on a recurring basis on the Consolidated Balance Sheets as of December 31, 2016 and 2015:

	Fair Value Measurement as of December 31, 2016			
($ in thousands)	Level 1	Level 2	Level 3	Total
Assets				
Long-term investments, at fair value	$ -	$ -	$ 1,414	$ 1,414
Total	$ -	$ -	$ 1,414	$ 1,414
Liabilities				
Contingently Issuable Warrants	$ -	$ -	$ 302	$ 302
Warrant liabilities	-	-	179	179
Helocyte Convertible Note, at fair value	-	-	4,487	4,487
Avenue Convertible Note, at fair value	-	-	200	200
Total	$ -	$ -	$ 5,168	$ 5,168

($ in thousands)	Fair Value Measurement as of December 31, 2015			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets				
Long-term investments, at fair value	$ -	$ -	$ 2,485	$ 2,485
Liabilities				
Derivative warrant liability	$ -	$ -	$ 114	$ 114

The following table shows the fair values hierarchy of National's financial instruments measured at fair value on a recurring basis on the Consolidated Balance Sheets as of September 30, 2016:

($ in thousands)	Fair Value Measurement as of September 30, 2016			
	Level 1	**Level 2**	**Level 3**	**Total**
Assets				
Corporate stock	101		—	101
Municipal bonds	—	2,111	—	2,111
Restricted stock	—	145	—	145
Total	$ 101	$ 2,256	$ —	$ 2,357
Liabilities				
Corporate stock	298	—	—	298
Warrants issuable			14,359	14,359
Total	$ 298	$ —	$ 14,359	$ 14,657

Warrants Issuable

In accordance with the Merger Agreement, since less than 80% of National's issued and outstanding shares of common stock were tendered, National remains a publicly-traded company and stockholders post-tender offer will receive from National a five-year warrant per held share to purchase an additional share of the Company's common stock at $3.25 as a dividend to all holders of National's common stock.

As National does not have the ability to settle the warrants with unregistered shares and maintenance of an effective registration statement (which did not exist at September 30, 2016) may be considered outside of the Company's control, net cash settlement of the warrants is assumed. Accordingly, National was obligated to issue the warrants. The fair value of the 5.4 million warrants issuable (represents 44% of the warrants issued to non-Fortress shareholders) are being classified as a liability in the consolidated statement of financial condition at September 30, 2016. Such valuation (using level 3 inputs) was determined by use of the Black-Scholes option pricing model using the following assumptions:

	September 30, 2016
Dividend yield	0.00%
Expected volatility	118.85%
Risk-free interest rate	1.14%
Life (in years)	5

In the Merger Agreement, National agreed to set a record date within ninety (90) days following the Acceptance Time (as defined therein) with respect to the distribution to its stockholders of warrants to purchase one share of its common stock for every share of its common stock owned at an exercise price of $3.25 per share (the "Warrants Issuable"). National announced on October 26, 2016, that it had established December 9, 2016 as the record date with respect to the Warrants Issuable.

As a result of "due bill" trading procedures, those persons who held shares of National's common stock as of the record date, or who acquire shares of National's common stock in the market following the record date, and in each case who continue to hold such shares at the close of trading the date before the ex-dividend date to be established by The Nasdaq Stock Market with respect to the Warrants Issuable, will be entitled to receive a Warrants Issuable with respect to each share of National's common stock owned by such person as of the ex-dividend date.

Conversely, those persons who held shares of National's common stock as of the record date, or who acquire shares of National's common stock in the market following the record date, but in each case who do not hold such shares of National's common stock at the close of trading on the date before the ex-dividend date, will not be entitled to receive any Warrants Issuable with respect to such shares.

Therefore, a shareholder selling their shares of National's common stock prior to the ex-dividend date would not receive any Warrants Issuable with respect to the shares that are sold by such person even if such person held the shares on the record date, since the shares of National's common stock sold would be accompanied by a "due-bill" entitling the buyer of those shares to receive the Warrants Issuable with respect to such shares.

The actual right to receive the Warrants Issuable with respect to any shares of National's common stock requires still holding such shares until the ex-dividend date.

National listed the Warrants Issuable on the Nasdaq Capital Market under the symbol "NHLDW" in February 2017.

The table below provides a roll forward of the changes in fair value of Level 3 financial instruments for the years ended December 31, 2016 and 2015:

($ in thousands)	Investment in Origo	Investment in laser device	Contingently Issuable Warrants	Helocyte Convertible Note, at fair value	Avenue Convertible Note, at fair value	Warrant liabilities	Total
Balance at December 31, 2015	$ 2,235	$ 250	$ 114	$ -	$ -	$ -	$ 2,599
Additions during the period	-	-	14,040	4,409	200	440	19,089
Issuance of warrants	-	-	(793)	-	-	-	(793)
Change in fair value of investments	(1,071)	-	-	-	-	-	(1,071)
Change in fair value of convertible notes	-	-	-	78		-	78
Change in fair value of derivative liabilities	-	-	1,300	-		(261)	1,039
Balance at December 31, 2016	$ 1,164	$ 250	$ 14,661	$ 4,487	$ 200	$ 179	$ 20,942

($ in thousands)	Investment in Origo	Investment in laser device	Contingently Issuable Warrants	Warrant liabilities	Total
Balance at December 31, 2014	$ 3,910	$ 250	$ -	$ -	$ 4,160
Additions during the period	-	-	175	114	289
Change in fair value of investments	(1,675)	-	-	-	(1,675)
Change in fair value of derivative liabilities	-	-	438	-	438
Issuance of warrants			(613)		(613)
Balance at December 31, 2015	$ 2,235	$ 250	$ -	$ 114	$ 2,599

8. Licenses Acquired

2016 and 2015 Activities

In accordance with ASC 730-10-25-1, *Research and Development*, costs incurred in obtaining technology licenses are charged to research and development expense if the technology licensed has not reached technological feasibility and has no alternative future use. The assets purchased by Fortress, Avenue, Mustang, Checkpoint, Coronado SO, Helocyte, Cellvation and Escala require substantial completion of research and development, regulatory and marketing approval efforts in order to reach technological feasibility. As such, for the year ended December 31, 2016, the purchase price of licenses, totaling approximately $5.5 million, was classified as research and development-licenses acquired in the Consolidated Statements of Operations.

For the years ended December 31, 2016, 2015 and 2014, the Company's research and development-licenses acquired are comprised of the following:

	For the Years Ended December 31,		
($ in thousands)	**2016**	**2015**	**2014**
Fortress	$ 325	$ -	$ -
Fortress Companies:			
Avenue	-	3,000	-
Checkpoint	3,160	3,159	-
Coronado SO	-	1,607	-
Helocyte	53	200	-
Mustang	1,682	2,147	-
Escala	-	1,295	-
Cellvation	312	-	-
Total	$ 5,532	$ 11,408	$ -

Fortress Biotech, Inc.

In July 2016, Fortress entered into a License Agreement with GeneMedicine, Inc. ("GeneMedicine") to develop products using Gene Medicine's oncolytic adenovirus technology. In connection with the license agreement, Fortress agreed to provide GeneMedicine $0.3 million in funding for an 18-month research study in connection with the technology, of which Fortress paid $0.1 million upon initiation. The license contains an additional 11 development milestones totaling approximately $19.3 million upon achievement and a single digit royalty on net sales is due for the term of the contract.

In September 2016, Fortress entered into a Development and License Agreement with Effcon Laboratories, Inc. ("Effcon") for the extended release formulation of methazolamide. Fortress made an upfront payment to Effcon of $0.2 million. Seven additional milestone payments totaling up to $5.3 million may become payable upon the achievement of certain developmental and sales milestones. Fortress agreed to fund a related development budget of up to $1.6 million. A mid-single digit to low double-digit royalty on net sales is due for the term of the contract.

Avenue Therapeutics, Inc.

License Agreement with Revogenex Ireland Ltd

In February 2015, the Company purchased an exclusive license to IV Tramadol for the U.S. market from Revogenex, a privately held company in Dublin, Ireland. Fortress made an upfront payment of $2.0 million to Revogenex upon execution of the exclusive license, which has been included in research and development-licenses acquired on the Consolidated Statements of Operations. In addition, on June 17, 2015, the Company paid an additional $1.0 million to Revogenex after receiving all the assets specified in the agreement. Under the terms of the agreement, Revogenex is eligible to receive additional milestone payments upon the achievement of certain development milestones, in addition to royalty payments for sales of the product. Tramadol is a centrally acting synthetic opioid analgesic for moderate to moderately severe pain and is available as immediate release or extended-release tablets in the United States.

The Company transferred the Revogenex license and all other rights and obligations of Fortress under the License Agreement to Avenue pursuant to the Avenue Founders Agreement effective as of February 17, 2015. Per the terms of the agreement, Avenue assumed $3.0 million in debt (See Note 11).

During the year ended December 31, 2016, Avenue completed a pharmacokinetics or PK study for IV Tramadol in healthy volunteers and completed an End-of-Phase 2 (EOP) meeting with the FDA. Initiation of the Phase 3 study is anticipated to begin in 2017.

Cellvation, Inc.

In October 2016, Cellvation entered into a license agreement with the University of Texas Health Science Center at Houston ("University of Texas") for the treatment of traumatic brain injury using Autologous Bone Marrow Mononuclear Cells (the "Initial TBI License") for an upfront fee of $0.3 million and the issuance of 500,000 common shares representing 5% of the outstanding shares of Cellvation. An additional 9 development milestones approximating $6.2 million are due in connection with the development of adult indications, and an additional 8 development milestones approximating $6.0 million are due in connection with the development of pediatric indications, as well as single digit royalty net sales and royalty milestones are due for the term of the contract. An additional minimum annual royalty ranging from $50,000 to $0.2 million is due, depending on the age of the license. In addition, Cellvation entered into a secondary license with the University of Texas for a method and apparatus for conditioning cell populations for cell therapies (the "Second TBI License"). Cellvation paid an upfront fee of $50,000 in connection with the Second TBI License, and a minimum annual royalty of $0.1 million is payable beginning in the year after first commercial sale occurs (which minimum annual royalty is creditable against actual royalties paid under the Second TBI License. Additional payments of $0.3 million

are due for the completion of certain development milestones and single digit royalties upon the achievement of net sales. In connection with the two University of Texas licenses, Cellvation granted each of two University of Texas researchers acting as consultants to Cellvation 500,000 shares of Cellvation common stock.

The Company valued the stock grant to the University of Texas utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 40.2%, weighted average cost of capital of 30%, and net of debt utilized, resulting in a value of $0.024 per share or $12,000 in October 2016. During the year ended December 31, 2016, in connection with the grant, $12,000 of expenses was included in research and development - licenses acquired on the Consolidated Statements of Operations.

Checkpoint Therapeutics, Inc.

Dana-Farber Cancer Institute

In March 2015, Checkpoint entered into an exclusive license agreement with Dana-Farber Cancer Institute ("Dana-Farber") to develop a portfolio of fully human immuno-oncology targeted antibodies. The portfolio of antibodies licensed from Dana-Farber include antibodies targeting PD-L1, GITR and CAIX. Under the terms of the agreement, Checkpoint paid Dana-Farber an up-front licensing fee of $1.0 million in 2015 and, on May 11, 2015, granted Dana-Farber 500,000 shares of Checkpoint common stock, valued at $32,500 or $0.065 per share. The agreement included an anti-dilution clause that maintained Dana-Farber's ownership at 5% until such time that Checkpoint raised $10.0 million in cash in exchange for common shares. Pursuant to this provision, on September 30, 2015, Checkpoint granted to Dana-Farber an additional 136,830 shares of common stock valued at approximately $0.6 million and the anti-dilution clause thereafter expired. Dana-Farber is eligible to receive payments of up to an aggregate of approximately $21.5 million for each licensed product upon Checkpoint's successful achievement of certain clinical development, regulatory and first commercial sale milestones. In addition, Dana-Farber is eligible to receive up to an aggregate of $60.0 million upon Checkpoint's successful achievement of certain sales milestones based on aggregate net sales, in addition to royalty payments based on a tiered low to mid-single digit percentage of net sales. Following the second anniversary of the effective date of the Dana-Farber license agreement, Dana-Farber will receive an annual license maintenance fee, which is creditable against milestone payments or royalties due to Dana-Farber. Checkpoint expects to submit investigational new drug ("IND") applications for its anti-PD-L1 antibody in 2017, and its anti-GITR and anti-CAIX antibodies in 2018.

In connection with the license agreement with Dana-Farber, Checkpoint entered into a collaboration agreement with TGTX, a related party, to develop and commercialize the anti-PD-L1 and anti-GITR antibody research programs in the field of hematological malignancies, while Checkpoint retains the right to develop and commercialize these antibodies in the field of solid tumors. Michael Weiss, Chairman of the Board of Directors of Checkpoint is also the Executive Chairman, President and Chief Executive Officer and a stockholder of TGTX. Under the terms of the agreement, TGTX paid Checkpoint $0.5 million, representing an upfront licensing fee, and Checkpoint is eligible to receive substantive potential milestone payments up to an aggregate of approximately $21.5 million for each product upon TGTX's successful achievement of certain clinical development, regulatory and first commercial sale milestones. Checkpoint's potential milestone payments are comprised of up to approximately $7.0 million upon TGTX's successful completion of clinical development milestones, and up to approximately $14.5 million upon first commercial sales in specified territories. In addition, Checkpoint is eligible to receive up to an aggregate of $60.0 million upon TGTX's successful achievement of certain sales milestones based on aggregate net sales, in addition to royalty payments based on a tiered high single digit percentage of net sales. Following the second anniversary of the effective date of the agreement, Checkpoint will receive an annual license maintenance fee, which is creditable against milestone payments or royalties due to Checkpoint. During the year ended December 31, 2016 and 2015, the Company recognized approximately $42,000 and $0.6 million, respectively in revenue from its collaboration agreement with TGTX on the Consolidated Statements of Operations.

NeuPharma, Inc.

In March, 2015, the Company entered into an exclusive license agreement with NeuPharma, Inc. ("NeuPharma") to develop and commercialize novel irreversible, 3rd generation epidermal growth factor receptor ("EGFR") inhibitors including CK-101, on a worldwide basis (other than certain Asian countries). On the same date, the Company assigned all of its right and interest in the EGFR inhibitors to Checkpoint. Under the terms of the agreement, Checkpoint paid NeuPharma an up-front licensing fee of $1.0 million in 2015, and NeuPharma is eligible to receive payments of up to an aggregate of approximately $40.0 million per licensed product upon Checkpoint's successful achievement of certain clinical development and regulatory milestones in up to three indications, of which $22.5 million are due upon various regulatory approvals to commercialize the products. In addition, NeuPharma is eligible to receive payments of up to an aggregate of $40.0 million upon Checkpoint's successful achievement of certain sales milestones based on aggregate net sales, in addition to royalty payments based on a tiered mid to high-single digit percentage of net sales. In September 2016, Checkpoint dosed the first patient in a Phase 1/2 clinical study of CK-101.

In connection with the license agreement with NeuPharma, in March 2015, the Company entered into an option agreement with TGTX, a related party, which agreement was assigned to Checkpoint on the same date, for a global collaboration of certain compounds licensed. The option agreement will expire on December 31, 2017 unless both parties agree to extend the option period.

Also in connection with the license agreement with NeuPharma, Checkpoint entered into a Sponsored Research Agreement with NeuPharma for certain research and development activities. Effective January 11, 2016, TGTX, a related party, agreed to assume all costs associated with this agreement and paid Checkpoint for all amounts previously paid by Checkpoint. The company recognized approximately $1.0 million in revenue related to this agreement for the year ended December 31, 2016. There was no related revenue recognized during 2015.

Teva Pharmaceutical Industries Ltd. (through its subsidiary, Cephalon, Inc.)

In December 2015, the Company entered into a license agreement with Teva Pharmaceutical Industries Ltd. through its subsidiary, Cephalon, Inc. ("Cephalon"), which agreement was assigned to Checkpoint by the Company on the same date. Under the terms of the license agreement, Checkpoint obtained an exclusive, worldwide license to Cephalon's patents relating to CEP-8983 and its small molecule prodrug, CEP-9722, a PARP inhibitor, which Checkpoint now refers to as CK-102. Checkpoint paid Cephalon an up-front licensing fee of $0.5 million in 2015. Cephalon is eligible to receive milestone payments of up to an aggregate of approximately $220.0 million upon Checkpoint's successful achievement of certain clinical development, regulatory approval and product sales milestones, of which approximately $206.5 million are due on or following regulatory approvals to commercialize the product. In addition, Cephalon is eligible to receive royalty payments based on a tiered low double digit percentage of net sales. Checkpoint is currently developing a clinical program for its PARP inhibitor, which it expects to commence in the next 12 months.

Jubilant Biosys Limited

In May 2016, Checkpoint entered into a license agreement with Jubilant Biosys Limited ("Jubilant"), whereby Checkpoint obtained an exclusive, worldwide license (the "Jubilant License") to Jubilant's family of patents covering compounds that inhibit BRD4, a member of the BET domain for cancer treatment, including CK-103. Under the terms of the Jubilant License, Checkpoint paid Jubilant an up-front licensing fee of $2.0 million, and Jubilant is eligible to receive payments up to an aggregate of approximately $89.0 million upon Checkpoint's successful achievement of certain preclinical, clinical development, and regulatory milestones, of which $59.5 million are due upon various regulatory approvals to commercialize the products. In addition, Jubilant is eligible to receive payments up to an aggregate of $89.0 million upon Checkpoint's successful achievement of certain sales milestones based on aggregate net sales, in addition to royalty payments based on a tiered low to mid-single digit percentage of net sales. Checkpoint plans to submit an IND application for its BET inhibitor in the second half of 2017. The purchase price of $2.0 million for the license was classified as *research and development-licenses acquired* in the Consolidated Statements of Operations during the year ended December 31, 2016.

In connection with the Jubilant License, Checkpoint entered into a sublicense agreement with TGTX (the "Sublicense Agreement"), a related party, to develop and commercialize the compounds licensed in the field of hematological malignancies, with Checkpoint retaining the right to develop and commercialize these compounds in the field of solid tumors. Michael Weiss, Chairman of the Board of Directors of Checkpoint and the Company's Executive Vice Chairman, Strategic Development, is also the Executive Chairman, President and Chief Executive Officer and a stockholder of TGTX. Under the terms of the Sublicense Agreement, TGTX paid Checkpoint $1.0 million, representing an upfront licensing fee, recorded as collaboration revenue – related party and Checkpoint is eligible to receive substantive potential milestone payments up to an aggregate of approximately $87.5 million upon TGTX's successful achievement of preclinical, clinical development, and regulatory milestones. Such potential milestone payments may approximate $0.3 million upon TGTX's successful achievement of one preclinical milestone, up to approximately $25.5 million upon TGTX's successful completion of three clinical development milestones for two licensed products, and up to approximately $61.7 million upon the achievement of five regulatory approvals and first commercial sales in specified territories for two licensed products. In addition, Checkpoint is eligible to receive potential milestone payments up to an aggregate of $89.0 million upon TGTX's successful achievement of three sales milestones based on aggregate net sales by TGTX, for two licensed products, in addition to royalty payments based on a mid-single digit percentage of net sales by TGTX. TGTX also pays Checkpoint for 50% of IND enabling costs and patent expenses. The Company recognized $1.5 million in revenue related to this arrangement during the year ended December 31, 2016. There was no related revenue recognized during 2015.

Coronado SO Co.

License Agreement

In February 2015, Coronado SO entered into an exclusive license agreement with a third party for a topical product used in the treatment of hand-foot syndrome, a common painful side effect of chemotherapeutics. Coronado SO paid $0.9 million upfront, included in research and development-licenses acquired on the Consolidated Statements of Operations and issued a stock grant of 150,000 shares of Coronado SO common stock to such third party. In October 2015, Coronado SO paid an additional $0.5 million, which is included in research and development-licenses acquired on the Consolidated Statements of Operations. Four milestones totaling $10.7 million are due upon the achievement of certain development goals, three milestones totaling $26.2 million are due upon certain net sales milestones and a single digit royalty on net sales is due for the term of the contract.

The Company valued the stock grant to the third party utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.8% and a weighted average cost of capital of 30%, and net of debt utilized, resulting in a value of $1.19 per share or $0.2 million recorded as part of licenses acquired.

Helocyte, Inc.

License Agreement with the City of Hope

In March 2016, Helocyte entered into amended and restated license agreements for each of its PepVax and Triplex immunotherapies programs with its licensor City of Hope National Medical Center ("COH"). The amended and restated licenses expand the intellectual property and other rights granted to Helocyte by COH in the original license agreement. The financial terms of the original license have not been modified, and if Helocyte successfully develops and commercializes PepVax and Triplex, COH will receive milestones, royalties and other payments.

Helocyte entered into the original license agreement with COH on March 31, 2015, to secure: (i) an exclusive worldwide license for two immunotherapies for CMV control in the post-transplant setting (known as Triplex and PepVax); and (ii) an option for an exclusive worldwide license to an immunotherapy for the prevention of congenital CMV (known as Pentamer). In consideration for the license and option, Helocyte made an upfront payment of $150,000. On April 28, 2015, Helocyte exercised the option and secured exclusive worldwide rights to Pentamer from COH for an upfront payment of $45,000. If Helocyte successfully develops PepVax, COH could receive, up to $1.5 million for the achievement of three developmental milestones, $13.0 million for three sales milestones, single digit royalties based on net sales reduced by certain factors and a minimum annual royalty of $0.2 million per year related to marketing approval. If Helocyte successfully develops and commercializes Triplex, COH could receive up to $9.0 million for the achievement of three developmental milestones, $26.0 million for three sales milestones, single digit royalties based on net sales reduced by certain factors and a minimum annual royalty of $0.75 million per year following a first marketing approval. If Helocyte successfully develops and commercializes Pentamer, COH could receive up to $5.5 million for the achievement of four development milestones, $26.0 million for three sales milestones, single digit royalties based on net sales reduced by certain factors and a minimum annual royalty of $0.75 million per year following a first marketing approval. In 2015, Triplex and PepVax both entered Phase 2 clinical studies. The programs are supported by grants awarded to COH by the National Cancer Institute.

As further consideration for the licenses, in March and May 2016, Helocyte granted COH 500,000 shares of Helocyte Class A common stock and 8,333 shares of Helocyte Class A common stock, respectively. The Company valued the stock grants to the COH utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.5% and a weighted average cost of capital of 30%, net of debt utilized resulting in a value of $0.097 per share or $48,500 recorded as part of the license fee acquired.

Mustang Bio, Inc.

License Agreement with the City of Hope

In March 2015, Mustang entered into an exclusive license agreement with COH to acquire intellectual property rights pertaining to CAR-T (the "COH License"). Pursuant to the COH License, Mustang paid COH an upfront fee of $2.0 million in April 2015 (included in *research and development-licenses acquired expenses* on the Consolidated Statement of Operations), and granted COH 1.0 million shares of Mustang's Class A Common Stock, representing 10% ownership of Mustang. Additional payments totaling $2.0 million are due upon the completion of two financial milestones, and payments totaling $14.5 million are due upon the completion of six development goals. Future mid-single digit royalty payments are due on net sales of licensed products, with a minimum annual royalty of $1.0 million.

The Company valued the stock grant to COH utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.8%, weighted average cost of capital of 30%, and net of debt utilized, resulting in a value of $0.147 per share or $0.1 million on March 31, 2015. During the year ended December 31, 2015, in connection with the grant, $0.1 million of expenses were included in research and development - licenses acquired on the Consolidated Statements of Operations.

Effective October 2016, Mustang closed on gross proceeds of $10.0 million from third party investors in connection with its private placement, which triggered the issuance of additional 293,588 shares of Mustang Class A common stock to COH (the "COH Anti-Dilution Shares") in connection with the COH License. The shares were valued utilizing a weighted market model at approximately $5.73 per share or $1.7 million in total. Since Mustang only had 1.0 million Class A common shares authorized at December 31, 2016, of which all were issued to COH, Mustang recorded the contingent issuance as a current liability. In February 2017, COH executed a waiver and acknowledgement agreement permitting issuance of the COH Anti-Dilution Shares in the form of Mustang Common Stock, and such shares were issued.

Escala Therapeutics, Inc.

On July 16, 2015, Escala acquired from New Zealand Pharmaceuticals Limited ("NZP") a license from the NIH and cooperative research and development agreements for the development of oral ManNAc, a key compound in the sialic biosynthetic pathway, for the treatment of hyposialylation disorders, including GNE myopathy and various forms of nephropathy. As part of this agreement, Escala provided NZP and NIH an upfront payment of approximately $1.3 million comprised of an upfront milestone payment of $0.7 million to NZP and reimbursement of $0.6 million of development costs for Phase II Myopathy and Phase I Nephropathy Clinical Trial being conducted at the NIH. Additional development and sales-based milestone payments are payable upon achievement. During the year ended December 31, 2015, Escala recorded an expense of approximately $1.3 million in research and development-licenses acquired on the Consolidated Statements of Operations.

Seven milestones totaling approximately $22.0 million are due upon the achievement of certain development goals, two milestones totaling $7.0 million are due upon certain net sales milestones and a single digit royalty on net sales is due for a certain period. In addition, a one-time payment is due upon the termination of the license.

9. Milestones and Sponsored Research Agreements

Fortress Biotech, Inc.

The Company has a license agreement with the University College London Business PLC ("UCLB") under which the Company received an exclusive, worldwide license to develop and commercialize CNDO-109 to activate NK cells for the treatment of cancer-related and other conditions. In consideration for the license, the Company made upfront payments totaling $0.1 million and may be required to make future milestone payments totaling up to approximately $22.0 million upon the achievement of various milestones related to regulatory or commercial events. In March 2016, the Company paid UCLB $0.4 million due upon completion of the Phase 1 study for Acute Myeloid Leukemia. In the event that CNDO-109 is commercialized, the Company is obligated to pay to UCLB annual royalties ranging from 3% to 5% based upon various levels of net sales of the product. Under the terms of the license agreement, the Company is allowed to grant sublicenses to third parties without the prior approval of UCLB. In the event that the Company sublicenses CNDO-109 to a third party, the Company is obligated to pay to UCLB all or a portion of the royalties the Company receives from the sub-licensee. Through December 31, 2016, the Company has not sub-licensed CNDO-109 to a third party.

Cellvation, Inc.

In October 2016, Cellvation entered research funding agreement with the University of Texas in connection with the license for a method and apparatus for conditioning cell populations for cell therapies. In connection with this agreement Cellvation agreed to fund $0.7 million of research quarterly through March 31, 2018. For the twelve months ended December 31, 2016, Cellvation recorded an expense of $0.2 million representing amounts due under this arrangement.

Helocyte, Inc.

In March 2016, Helocyte entered into an Investigator-Initiated Clinical Research Support Agreement, as amended, with the COH, to support a Phase 2 clinical study of its PepVax immunotherapy for CMV control in allogeneic stem cell transplant recipients ("PepVax Research Agreement"). The Phase 2 study is additionally supported by grants from the National Institutes of Health/National Cancer Institute ("NCI"). Under the terms of the agreement, Helocyte made an upfront payment to COH of $1.0 million, recorded as sponsored research expense, and will pay COH up to an additional $2.0 million upon the achievement of certain clinical milestones. Unless earlier terminated, the agreement expires upon the delivery of a final study report or December 31, 2018.

In February 2016, Helocyte entered into an Investigator-Initiated Clinical Research Support Agreement, as amended, with the COH, to support a Phase 2 clinical study of its Triplex immunotherapy for CMV control in allogeneic stem cell transplant recipients ("Triplex Research Agreement"). The Phase 2 study is additionally supported by grants from the NCI. Under the terms of the agreement, Helocyte made an upfront payment to COH of $1.0 million, recorded as sponsored research expense, and will pay COH up to an additional $3.4 million upon the achievement of certain clinical milestones. Unless earlier terminated, the agreement expires upon the delivery of a final study report or May 31, 2018.

In August 2016, Helocyte made a payment of $2.0 million; $1.0 million in connection with its PepVax Research Agreement and $1.0 million in connection with their Triplex Research Agreement. As of December 31, 2016 and 2015, Helocyte recorded approximately $4.4 million, consisting of $2.4 million in connection with the Triplex Research Agreement and $2.0 million in connection with the PepVax Research Agreement and nil, respectively, in research and development expenses in the Company's Consolidated Statements of Operations in connection with these agreements.

Mustang Bio, Inc.

In March 2015, in connection with Mustang's license with COH for the development of CAR-T, Mustang entered into a Sponsored Research Agreement in which Mustang will fund continued research in the amount of $2.0 million per year, payable in four equal annual installments, over the next five years. For the year ended December 31, 2016 and 2015, Mustang incurred expense of $2.0 million $1.5 million, respectively and recorded as research and development expense in the Company's Consolidated Statement of Operations.

10. Intangibles

Journey Medical Corporation

In January 2016, JMC entered into a licensing agreement with a third party to distribute its prescription wound cream Luxamend™ and paid an upfront fee of $50,000. Additionally, in January 2016, JMC entered into a licensing agreement with a third party to distribute its prescription emollient Ceracade™ for the treatment of various types of dermatitis and paid an upfront fee of $0.3 million. JMC commenced the sale of both of these products during the three months ended June 30, 2016 and accordingly commenced the amortization of these costs over their respective three year estimated useful life. For the year ended December 31, 2016, JMC recognized expense of approximately $0.2 million, which was recorded in costs of goods sold on the Consolidated Statement of Operations (see Note 22).

In March 2015, JMC entered into a license and supply agreement to acquire the rights to distribute Targadox™ a dermatological product for the treatment of acne. JMC made an upfront payment of $1.3 million. Further payments will be made based on a revenue sharing arrangement. JMC received FDA approval for the manufacturing of this product in July 2016 and commenced sales of this product in October 2016.

11. Debt and Interest

Debt

Total debt consists of the following as of December 31, 2016 and December 31, 2015:

	December 31,			
($ in thousands)	**2016**	**2015**	**Interest rate**	**Maturity**
IDB Note	$ 14,929	$ 14,009	2.25%	Feb - 2018
NSC Note	3,608	10,000	8.00%	Sep - 2018
Opus Credit Facility	7,000	-	12.00%	Sep - 2018
Helocyte Convertible Note, at fair value	1,031	-	5.00% - 8.00%	Dec - 2017
Helocyte Convertible Note, at fair value	2,051	-	5.00% - 8.00%	March - 2018
Helocyte Convertible Note, at fair value	1,405	-	5.00% - 8.00%	May - 2018
Avenue Convertible Note, at fair value	200	-	5.00% - 8.00%	June - 2018
Total notes payable	30,224	24,009		
Less: Discount on notes payable	2,009	835		
Total notes payable, long-term	$ 28,215	$ 23,174		

IDB Note

On February 13, 2014, the Company executed a promissory note in favor of IDB in the amount of $15.0 million (the "IDB Note"). The Company borrowed $14.0 million against this note and used it to repay its prior loan from Hercules Technology Growth Capital, Inc. The Company may request revolving advances under the IDB Note in a minimum amount of $0.1 million (or the remaining amount of the undrawn balance under the IDB Note if such amount is less than $0.1 million). All amounts advanced under the IDB Note are due in full at the earlier of: (i) February 27, 2018, as extended or (ii) on the IDB's election following the occurrence and continuation of an event of default. The unpaid principal amount of each advance shall bear interest at a rate per annum equal to the rate payable on the Company's money market account plus a margin of 150 basis points. The interest rate at December 31, 2016 was 2.25%. The IDB Note contains various representations and warranties customary for financings of this type.

The obligations of the Company under the IDB Note are collateralized by a security interest in, a general lien upon, and a right of set-off against the Company's money market account of $15.0 million pursuant to the Assignment and Pledge of Money Market Account, dated as of February 13, 2014 (the "Pledge Agreement"). Pursuant to the Pledge Agreement, the Bank may, after the occurrence and continuation of an event of default under the IDB Note, recover from the money market account all amounts outstanding under the IDB Note. The Pledge Agreement contains various representations, warranties, and covenants customary for

pledge agreements of this type.

The Company will default on the IDB Note if, among other things, it fails to pay outstanding principal or interest when due. Following the occurrence of an event of default under the IDB Note, the Bank may: (i) declare the entire outstanding principal balance of the IDB Note, together with all accrued interest and other sums due under the IDB Note, to be immediately due and payable; (ii) exercise its right of setoff against any money, funds, credits or other property of any nature in possession of, under control or custody of, or on deposit with IDB; (iii) terminate the commitments of IDB; and (iv) liquidate the money market account to reduce the Company's obligations to IDB.

During 2016, the Company and IDB extended the maturity date of the IDB Note to February 27, 2018. At December 31, 2016 and 2015, the Company had approximately $14.9 million and $14.0 million, respectively, outstanding under its promissory note with IDB. The Company applied the 10% cash flow test pursuant to ASC 470 to calculate the difference between the present value of the amended IDB Note's cash flows and the present value of the original remaining cash flow and concluded that the results didn't exceed the 10% factor, the debt modification is not considered substantially different and did not apply extinguishment accounting, rather accounting for the modification on a prospective basis pursuant to ASC 470. The Company only pays interest on the IDB Note through maturity.

NSC Note

In March 2015, the Company closed a private placement of a promissory note for $10.0 million through National Securities Corporation's NSC Biotech Venture Fund I, LLC (the "NSC Note"). The Company's Chairman, President and Chief Executive Officer and the Company's Executive Vice President, Strategic Development, are Co-Portfolio Managers and Partners of Opus Point Partners Management, LLC ("OPPM"), which owns approximately 4.7% of National Holdings Corporation, Inc. the parent of National Securities Inc. The Company used the proceeds from the NSC Note to acquire medical technologies and products. The NSC Note matures in 36 months, provided that during the first 24 months the Company can extend the maturity date by six months. No principal amount is due for the first 24 months (or the first 30 months if the maturity date is extended). Thereafter, the NSC Note will be repaid at the rate of 1/12 of the principal amount per month for a period of 12 months. Interest on the note is 8% payable quarterly during the first 24 months (or the first 30 months if the note is extended) and monthly during the last 12 months. NSC, a wholly owned subsidiary of National Holdings Corporation, acted as the sole placement agent for the NSC Note. The Company paid NSC a fee of $0.9 million during the year ended December 31, 2015, in connection with the NSC Note. At December 31, 2015, the Company recorded the fee as a discount to notes payable, long-term on the Consolidated Balance Sheets and amortized it over the life of the NSC Note. The effective interest rate on the NSC Note was approximately 17.83% and 14.0% at December 31, 2016 and 2015, respectively.

The NSC Note was amended and restated on July 29, 2015 to provide that any time a Fortress subsidiary receives from the Company any proceeds from the NSC Note, the Company may, in its sole discretion, cause the Fortress Company to issue to NSC Biotech Venture Fund I LLC a new promissory note (the "Amended NSC Note") on identical terms as the NSC Note, giving effect to the passage of time with respect to maturity. The Amended NSC Note will equal the dollar amount of the Fortress Company's share of the NSC Note and reduce the Company's obligations under the NSC Note by such amount. The Company will guarantee the Amended NSC Note until the Fortress Company either completes an initial public offering of its securities or raises sufficient equity capital so that it has cash equal to five times the Amended NSC Note. As of December 31, 2015, the Company transferred $2.8 million, $3.0 million and $3.6 million, including debt discount, of the NSC Note to Checkpoint, Avenue and Mustang, respectively, representing Checkpoint's, Avenue's and Mustang's pro rata share of the NSC Note. The Company applied the 10% cash flow test pursuant to ASC 470 to calculate the difference between the present value of the amended NSC's Note's cash flows and the present value of the original remaining cash flow and concluded that the results didn't exceed the 10% factor, the debt modification is not considered substantially different and did not apply extinguishment accounting, rather accounting for the modification on a prospective basis pursuant to ASC 470.

In connection with the transfer of NSC Note proceeds to a Fortress Company, NSC will receive a warrant to purchase the Fortress Company's common stock equal to 25% of the NSC Note proceeds transferred to that Fortress Company divided by the lowest price at which the Fortress Company sells its equity in its first third party financing. The warrants issued will have a term of 10 years and an exercise price equal to the par value of the Fortress Company's common stock.

On October 30, 2015, Checkpoint granted 139,592 warrants to NSC after an initial closing of an offering on September 30, 2015. The warrants are immediately vested with a ten-year term, and are exercisable at $0.0001 per share. The warrant upon issuance in October 2015, was valued at approximately $0.6 million. The initial fair value of $0.2 million was recorded as debt discount and will be amortized over the remaining life of the note. The incremental fair value at the time of issuance of $0.4 million was recorded as change in fair value of subsidiary's warrant liabilities on the Consolidated Statement of Operations. Upon the grant of the warrant, the Company no longer guaranteed Checkpoint's NSC Note.

On October 31, 2015, Avenue recorded approximately $0.1 million of debt discount related to the Contingently Issuable Warrants issued in connection with NSC Note, based on its fair value (see Note 5). The debt discount will be amortized over the life of the note.

In February 2016, Checkpoint repaid its NSC Debt of $2.8 million. Approximately $0.3 million, of which $0.2 million was related to the fair value of the NSC contingently issuable warrant, of unamortized debt discount was accelerated into interest expense upon payment.

In July 2016, Fortress transferred $3.6 million of Mustang's indebtedness to its NSC Note. In connection with the debt transfer a contingently issuable warrant equal to 25% of the transferred indebtedness will be recorded. The initial fair value of $0.6 million was recorded as debt discount and will be amortized over the remaining life of the note.

On October 25, 2016, Mustang issued 138,462 warrants to NSC after certain closings of Mustang's private placement. The warrants are immediately vested with a ten-year term, and are exercisable at $0.0001 per share. The warrants, upon issuance in October 2016, were valued at approximately $0.8 million. Upon the grant of the warrants, the Company no longer guaranteed Mustang's NSC Note.

As of December 31, 2016, Avenue recorded approximately $0.4 million of NSC debt discount of which $0.1 million relates to the Contingently Issuable Warrants issued in connection with the NSC Note, based on its initial fair value. The entire debt discount will be amortized over the life of the note.

In January 2017, the Company and Avenue notified NSC of their intention to extend the maturity date of the NSC Notes by six months, to September 2018.

Hercules Debt Agreement

In August 2012, the Company entered into a Loan and Security Agreement (the " Loan Agreement") with Hercules Technology Growth Capital, Inc. ("Hercules") pursuant to which the Company issued Hercules a $15.0 million note (the "Hercules Note") and received net proceeds of $ 14.7 million. The loan bore interest at a rate per annum equal to the greater of (i) 9.25% or (ii) 9.25% plus the sum of the prevailing prime rate minus 3.25%. The loan was to mature on March 1, 2016. The loan required interest-only payments for the initial 12 months and thereafter requires repayment of the principal balance with interest in 30 monthly installments. The Company had the option to extend the interest-only period for an additional six months, contingent upon the Company's achievement of certain clinical development milestones. In connection with the Loan Agreement, the Company granted first priority liens and the loan was collateralized by substantially all of the Company's assets (exclusive of intellectual property). The Loan Agreement also contains representations and warranties by the Company and Hercules and indemnification provisions in favor of Hercules and customary covenants (including limitations on other indebtedness, liens, acquisitions, investments and dividends, but no financial covenants), and events of default (including payment defaults, breaches of covenants following any applicable cure period, a material impairment in the perfection or priority of Hercules' security interest or in the collateral, and events relating to bankruptcy or insolvency). Pursuant to the Loan Agreement, Hercules had the right to participate, in an amount of up to $2.0 million, in subsequent private placements of our equity securities at the same terms and conditions, including price, as purchases by other investors. In connection with the Loan Agreement, the Company issued to Hercules a fully-vested, seven-year warrant (the "Warrant") to purchase 73,009 shares of its Common Stock at an exercise price of $5.65 per share and granted to Hercules certain "piggyback" registration rights with respect to the shares of Common Stock underlying the Warrant.

The fair value of the Warrant was calculated using the Black-Scholes option-pricing model with the following assumptions: volatility of 87.2%, an expected term equal to the contractual seven-year life of the Warrant, a risk-free interest rate of 1.1% and no dividend yield. The Company recorded the fair value of the Warrant of approximately $0.3 million as equity and as a discount to the carrying value of the loan. Also, upon full repayment or maturity of the loan, Hercules is due a payment of 2.65% of the loan, or $0.4 million, which is recorded as a discount to the loan and as a long-term liability. Additionally, the Company incurred fees related to the Loan Agreement and reimbursed Hercules for costs incurred by them related to the loan aggregating $0.2 million and which is reflected as a discount to the carrying value of the loan. The Company amortized these loan discounts totaling $0.9 million to interest expense over the term of the loan using the effective interest rate method, which approximates 12.3%.

On February 13, 2014, the Company repaid the Hercules Note in full. Early Payment of the Hercules Note was $14.0 million, consisting of principal of $13.2 million, end of term charge of $ 0.4 million, a prepayment fee of $0.3 million and interest of $0.1 million.

Helocyte Convertible Notes

During 2016 Helocyte entered into an agreement with Aegis Capital Corp. ("Aegis") to raise up to $5.0 million in convertible notes. The notes have an initial term of 18 months, which can be extended at the option of the holder, on one or more occasions, for up to 180 days and accrue simple interest at the rate of 5% per annum for the first 12 months and 8% per annum simple interest thereafter. The notes are guaranteed by Fortress. The outstanding principal and interest of the notes automatically converts into the type of equity securities sold by Helocyte in the next sale of equity securities in which Helocyte realizes aggregate gross cash proceeds of at least $10.0 million (before commissions or other expenses and excluding conversion of the notes) at a conversion price equal to the lesser of (a) the lowest price per share at which equity securities of Helocyte are sold in such sale less a 33% discount and (b) a per share price based on a pre-offering valuation of $50.0 million divided by the number of common shares outstanding on a fully-diluted basis. The outstanding principal and interest of the notes may be converted at the option of the holder in any sale of equity securities

that does not meet the $10.0 million threshold for automatic conversion using the same methodology. The notes also automatically convert upon a "Sale" of Helocyte, defined as (a) a transaction or series of related transactions where one or more non-affiliates acquires (i) capital stock of Helocyte or any surviving successor entity possessing the voting power to elect a majority of the board of directors or (ii) a majority of the outstanding capital stock of Helocyte or the surviving successor entity (b) the sale, lease or other disposition of all or substantially all of Helocyte's assets or any other transaction resulting in substantially all of Helocyte's assets being converted into securities of another entity or cash. Upon a Sale of Helocyte, the outstanding principal and interest of the notes automatically converts into common shares at a price equal to the lesser of (a) a discount to the price per share being paid in the Sale of Helocyte equal to 33% or (b) a conversion price per share based on a pre-sale valuation of $50.0 million divided by the fully-diluted common stock of Helocyte immediately prior to the Sale of Helocyte (excluding the notes).

As of December 31, 2016, Helocyte realized net proceeds in its four separate closings of $3.9 million after paying Aegis, its placement fee of $0.4 million, or approximately 10% of the net proceeds, and legal fees of approximately $0.1 million. Additionally, Aegis received warrants ("Helocyte Warrants") to purchase the number of shares of Helocyte's common stock equal to $0.4 million, divided by the price per share at which any note sold to investors first converts into Helocyte's common stock. The warrants are issued at each closing. The Helocyte Warrants, which were recorded as a liability in accordance with ASC 815, have a five-year term and have a per share exercise price equal to 110% of the price per share at which any note sold to investors first converts into Helocyte's common stock. The Offering expired on December 31, 2016.

Due to the complexity and number of embedded features within each convertible note, and as permitted under accounting guidance, the Company elected to account for the convertible notes and all the embedded features under the fair value option (see note 7).

Opus Credit Facility Agreement

On September 14, 2016, Fortress entered into a Credit Facility Agreement (the "Opus Credit Facility") with Opus Point Healthcare Innovations Fund, LP ("OPHIF"). Since Fortress's Chairman, President and Chief Executive Officer (Lindsay A. Rosenwald) and Fortress's Executive Vice President, Strategic Development (Michael S. Weiss), are Co-Portfolio Managers and Partners of Opus Point Partners Management, LLC ("Opus"), an affiliate of OPHIF, all of the disinterested directors of Fortress's board of directors approved the terms of the Credit Facility Agreement and accompanying Pledge and Security Agreement and forms of Note and Warrant (collectively, the "Financing Documents").

Pursuant to the Opus Credit Facility, Fortress may borrow up to a maximum aggregate amount of $25.0 million from OPHIF and any other lender that joins the Credit Facility Agreement from time to time (OPHIF and each subsequent lender, a "Lender") under one or more convertible secured promissory notes (each a "Note") from September 14, 2016 until September 1, 2017 (the "Commitment Period"). All amounts borrowed under the Credit Facility Agreement must be paid in full on September 14, 2018 (the "Maturity Date"), though Fortress may prepay the Notes at any time without penalty.

Pursuant to the Opus Credit Facility and form of Note, each Note will bear interest at 12% per annum and interest will be paid quarterly in arrears commencing on December 1, 2016 and on the first business day of each September, December, March and June thereafter until the Maturity Date. Upon the occurrence and continuance of an event of default (as specified in Credit Facility Agreement and form of Note), each Note will bear interest at 14% and be payable on demand. The Lenders may elect to convert the principal and interest of the Notes at any time into shares of Fortress's common stock ("Common Stock") at a conversion price of $10.00 per share. All Notes are secured by shares of capital stock currently held by Fortress in certain Fortress companies as set forth in the Pledge and Security Agreement entered into between Fortress, its wholly owned subsidiary, FBIO Acquisition, Inc., and OPHIF (as collateral agent on behalf of all the Lenders) on September 14, 2016 (the "Pledge and Security Agreement").

Fortress may terminate the Opus Credit Facility upon notice to the Lenders and payment of all outstanding obligations under the Credit Facility Agreement. Notwithstanding any early termination of the Credit Facility Agreement, within 15 days after termination of the Commitment Period, Fortress will issue each Lender warrants (each a "Warrant") pursuant to the terms of the Credit Facility Agreement and form of Warrant to purchase their pro rata share of (a) 1,500,000 shares of Common Stock; and (b) that number of shares of Common Stock equal to the product of (i) 1,000,000, times (ii) the principal amount of all Notes divided by 25,000,000. The Warrants will have a five-year term and will be exercisable at a price of $3.00 per share.

As of December 31, 2016, $7.0 million was outstanding under the Opus Credit Facility net of a debt discount related to the allocated value of the warrants of $2.0 million.

Avenue Convertible Notes

On December 31, 2016, Avenue held the first closing of the sale of convertible promissory notes (the " Avenue Notes"). The Avenue Notes have an initial term of 18 months, which can be extended at the option of the holder, on one or more occasions, for up to 180 days and accrue simple interest at the rate of 5% per annum for the first 12 months and 8% per annum simple interest thereafter. The Avenue Notes are guaranteed by Fortress. The outstanding principal and interest of the Avenue Notes automatically converts into the type of equity securities sold by Avenue in the next sale of equity securities in which Avenue realizes aggregate gross cash proceeds of at least $10.0 million (before commissions or other expenses and excluding conversion of the notes) at a conversion price equal to

the lesser of (a) the lowest price per share at which equity securities of Avenue are sold in such sale less a 33% discount and (b) a per share price based on a pre-offering valuation of $30.0 million divided by the number of common shares outstanding on a fully-diluted basis. The outstanding principal and interest of the Avenue Notes may be converted at the option of the holder in any sale of equity securities that does not meet the $10.0 million threshold for automatic conversion using the same methodology. The Avenue Notes also automatically convert upon a "Sale" of Avenue, defined as (a) a transaction or series of related transactions where one or more non-affiliates acquires (i) capital stock of Avenue or any surviving successor entity possessing the voting power to elect a majority of the board of directors or (ii) a majority of the outstanding capital stock of Avenue or the surviving successor entity (b) the sale, lease or other disposition of all or substantially all of Avenue's assets or any other transaction resulting in substantially all of Avenue's assets being converted into securities of another entity or cash. Upon a Sale of Avenue, the outstanding principal and interest of the Avenue Notes automatically converts into common shares at a price equal to the lesser of (a) a discount to the price per share being paid in the Sale of Avenue equal to 33% or (b) a conversion price per share based on a pre-sale valuation of $30.0 million divided by the fully-diluted common stock of Avenue immediately prior to the Sale of Avenue (excluding the Avenue Notes).

Gross proceeds from this offering totaled $0.2 million. Avenue realized net proceeds of $0.1 million after paying $58,000 of fees, of which $10,000 represents its placement fee (approximately 10% of the gross proceeds of $0.1 million for which the placement agent provided an introduction), legal fees of approximately $44,000 and other professional fees of $4,000. Additionally, the placement agent received warrants ("Avenue Warrants") to purchase the number of shares of Avenue's common stock equal to $10,000, divided by the price per share at which any note sold to investors first converts into Avenue common stock. The Avenue Warrants, which were recorded as a liability in accordance with ASC 815, have a ten-year term and have a per share exercise price equal to the price per share at which any note sold to investors first converts into Avenue's common stock. The offering expired on December 31, 2016.

Due to the complexity and number of embedded features within each convertible note, and as permitted under accounting guidance, the Company elected to account for the convertible notes and all the embedded features (collectively, the " hybrid instrument ") under the fair value option.

At December 31, 2016 Avenue had $0.2 million in outstanding under the Avenue Notes. The offering expired on December 31, 2016.

IDB Letters of Credit

The Company has several letters of credit ("LOC") with IDB securing rent deposits for lease facilities totaling approximately $1.5 million. Interest paid on the letters of credit is 2%.

Interest Expense

The following table shows the details of interest expense for all debt arrangements during the periods presented. Interest expense includes contractual interest and amortization of the debt discount and amortization of fees represents fees associated with loan transaction costs, amortized over the life of the loan:

	For the Years Ended December 31,		
($ in thousands)	**2016**	**2015**	**2014**
IDB Note			
Interest	$ 328	$ 314	$ 292
Amortization of fees	1	5	4
Total IDB Note	329	319	296
NSC Debt			
Interest	599	690	-
Amortization of fees	1,270	309	-
Total NSC Debt	1,869	999	-
Opus Credit Facility			
Interest	192	-	-
Amortization of fees	195	-	-
Total Opus Note	387	-	-
Ovamed			
Interest	-	166	154
Total Ovamed	-	166	154
LOC Fees			
Interest	11	-	-
Total LOC	11	-	-
Helocyte Convertible Note			
Interest	61	-	-
Financing fee	962	-	-
Total Helocyte Convertible Note	1,023	-	-

Avenue Convertible Note			
Financing fee	70	-	-
Total Avenue Convertible Note	70	-	-
Hercules Debt			
Interest [1]	-	-	845
Amortization of fees	-	-	43
Total Hercules Debt	-	-	888
D&O Insurance			
Interest	1	-	-
Total D&O Insurance	1	-	-
Total Interest Expense and Financing Fee	$ 3,690	$ 1,484	$ 1,338

(1) Interest expense related to the Company's loan with Hercules was $0.8 million, including $0.4 million related to accretion of the debt discount for the year ended December 31, 2014.

12. Accrued Liabilities and other Long-Term Liabilities

In December 2012, the Company acquired certain manufacturing rights from Ovamed and agreed to pay an aggregate of $1.5 million, in three installments of $0.5 million on December 12, 2014, 2015 and 2016, respectively. As of December 31, 2016, the Company made a payment of $1.1 million to Ovamed and will pay the remainder in 2017 pursuant to the terms of a settlement agreement. The remaining accrual is recorded on the Consolidated Balance Sheets as a current accrued expense of $0.9 million as of December 31, 2016. This obligation was recorded at its full value; accretion of the obligation was nil, $0.2 million and $0.2 million for the year ended December 31, 2016, 2015 and 2014, respectively, and is recorded as interest expense on the Consolidated Statements of Operations (see Note 8). On April 20, 2015, the Company decided to no longer pursue the development of TSO. As a result, the Company terminated all on-going TSO trials including its Phase 2A clinical trial in pediatric patients with autism spectrum disorder. A preliminary analysis of data from this trial failed to demonstrate any signal of activity.

The Company also had a collaboration agreement with Dr. Falk Pharma ("Falk") in connection with the development of TSO. Under this agreement, Falk was to provide the Company with the Final Clinical Study Report ("CSR"). On August 3, 2015, Falk notified the Company that the CSR was complete and that access to the CSR was available. While the Company disputes the adequacy of the CSR and does not believe any payment is due to Falk, upon receipt of access to the CSR, the Company recorded a liability of €2.5 million ($2.6 million) in accrued expenses as of December 31, 2016.

Accrued expenses and other long-term liabilities, excluding National, consisted of the following ($ in thousands):

	December 31,	
($ in thousands)	**2016**	**2015**
Accrued expenses:		
Professional fees	$ 1,253	$ 382
Salaries, bonuses and related benefits	2,846	2,492
Accrued Severance	53	
Ovamed manufacturing rights - short term component	900	2,007
Research and development	394	303
Dr. Falk Pharma milestone	2,634	2,717
JMC accrued cost of goods sold	726	-
Lease impairment	128	146
Other	1,148	523
Total accrued expenses	$ 10,082	$ 8,570
Other long-term liabilities:		
Deferred rent and long-term lease abandonment charge	5,014	584
Total other long-term liabilities	$ 5,014	$ 584

National's accounts payable and other accrued expenses as of September 30, 2016, consisted of the following ($ in thousands):

	September 30, 2016
Legal	$ 1,346
Audit	198
Telecommunications	209
Data Services	425
Regulatory	444
Settlements	832
Deferred rent	65
Contingent consideration payable	424
Other	3,223
Total	$ 7,166

13. Non-Controlling Interests

Non-controlling interests in consolidated entities are as follows:

	As of December 31, 2016								
($ in thousands)	**Avenue**	**Coronado SO**	**Mustang**	**Checkpoint**	**JMC**	**Helocyte**	**Cellvation**	**National Holdings**	**Total**
NCI equity share	$ (494)	$ (217)	$ 12,376	$ 32,160	$ (192)	$ (612)	$ 4	$ 17,643	$ 60,668
Net loss attributed to non-controlling interests	(349)	(19)	(1,805)	(11,733)	(355)	(1,155)	(158)	(621)	(16,195)
Non-controlling interests in consolidated entities	**$ (843)**	**$ (236)**	**$ 10,571**	**$ 20,427**	**$ (547)**	**$ (1,767)**	**$ (154)**	**$ 17,022**	**$ 44,473**

	As of December 31, 2015					
($ in thousands)	**Avenue**	**Coronado SO**	**Mustang**	**Checkpoint**	**JMC**	**Total**
NCI equity share	$ 6	$ 23	$ 14	$ 32,760	$ 79	$ 32,882
Net loss attributed to non-controlling interests	(567)	(240)	(373)	(3,855)	(420)	(5,455)
Non-controlling in interests consolidated entities	**$ (561)**	**$ (217)**	**$ (359)**	**$ 28,905**	**$ (341)**	**$ 27,427**

The components of non-controlling interests in loss of consolidated entities are as follows:

	For the year ended December 31, 2016								
($ in thousands)	**Avenue**	**Coronado SO**	**Mustang**	**Checkpoint (1)**	**JMC**	**Helocyte**	**Cellvation**	**National Holdings**	**Total**
Non-controlling interests in loss of consolidated entities	$ (349)	$ (19)	$ (1,805)	$ (11,733)	$ (355)	$ (1,155)	$ (158)	$ (621)	$ (16,195)
Non-controlling ownership	10.2%	13.0%	26.7%	62.9%	7.0%	20.5%	22.0%	43.4%	

(1) Checkpoint is consolidated with Fortress' operations because Fortress maintains voting control through its ownership of Checkpoint's Class A Common Shares which provide super-majority voting rights.

	For the year ended December 31, 2015					
($ in thousands)	**Avenue**	**Coronado SO**	**Mustang**	**Checkpoint**	**JMC**	**Total**
Non-controlling interests in loss of consolidated entities	$ (567)	$ (240)	$ (373)	$ (3,855)	$ (420)	$ (5,455)
Non-controlling ownership	11.5%	13%	10%	62.3%(1)	8.8%	

14. Net Loss per Common Share

The Company calculates loss per share using the two-class method, which is an earnings allocation formula that determines earnings per share for Common Stock and participating securities, if any, according to dividends declared and non-forfeitable participation rights in undistributed earnings. Under this method, all earnings (distributed and undistributed) are allocated to Common Stock and participating securities, if any, based on their respective rights to receive dividends. Holders of restricted Common Stock were entitled to all cash dividends, when and if declared, and such dividends are non-forfeitable. The participating securities do not have a contractual obligation to share in any losses of the Company. As a result, net losses are not allocated to the participating securities for any periods presented.

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of shares of Common Stock outstanding during the period, without consideration for Common Stock equivalents. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of Common Stock and Common Stock equivalents outstanding for the period.

Included in Common Stock issued and outstanding as of December 31, 2016, 2015 and 2014 were 8,749,052, 6,816,321 and 6,087,717 shares of unvested restricted stock, which is excluded from the weighted average Common Stock outstanding since its effect would be dilutive.

The Company's potential dilutive securities which consist of unvested restricted stock, unvested restricted stock units, options, and warrants have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average Common Stock outstanding used to calculate both basic and diluted net loss per share is the same.

The following shares of potentially dilutive securities, weighted during the years ended December 31, 2016, 2015, and 2014 have been excluded from the computations of diluted weighted average shares outstanding as the effect of including such securities would be antidilutive:

	For the Years Ended December 31,		
	2016	**2015**	**2014**
Warrants to purchase Common Stock	456,150	685,061	693,636
Opus warrants to purchase Common Stock	1,780,000	-	-
Options to purchase Common Stock	1,604,214	1,960,443	2,276,813
Unvested Restricted Stock	8,749,052	6,816,321	6,087,717
Unvested Restricted Stock Units	1,087,563	427,627	-
Total	13,676,979	9,889,452	9,058,166

15. Stockholders' Equity

Common Stock

The Company's Certificate of Incorporation, as amended, authorizes the Company to issue 15,000,000 shares of $0.001 par value Preferred Stock (none of which is outstanding at December 31, 2016 and 2015) and 100,000,000 shares of $0.001 par value Common Stock.

The terms, rights, preference and privileges of the Common Stock are as follows:

Voting Rights

Each holder of Common Stock is entitled to one vote per share of Common Stock held on all matters submitted to a vote of the stockholders, including the election of directors. The Company's certificate of incorporation and bylaws do not provide for cumulative voting rights.

Dividends

Subject to preferences that may be applicable to any then outstanding preferred stock, the holders of the Company's outstanding shares of Common Stock are entitled to receive dividends, if any, as may be declared from time to time by the Company's Board of Directors out of legally available funds.

Liquidation

In the event of the Company's liquidation, dissolution or winding up, holders of Common Stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of the Company's debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of Preferred Stock.

Rights and Preference

Holders of the Company's Common Stock have no preemptive, conversion or subscription rights, and there is no redemption or sinking fund provisions applicable to our Common Stock. The rights, preferences and privileges of the holders of Common Stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of the Company's preferred stock that are or may be issued.

Fully Paid and Nonassessable

All of the Company's outstanding shares of Common Stock are fully paid and nonassessable.

Stock-Based Compensation including National

As of December 31, 2016, the Company had four equity compensation plans: the Fortress Biotech, Inc. 2007 Stock Incentive Plan (the "2007 Plan"), the Fortress Biotech, Inc. 2013 Stock Incentive Plan, as amended (the "2013 Plan"), the Fortress Biotech, Inc. 2012 Employee Stock Purchase Plan (the "ESPP") and the Fortress Biotech, Inc. Long Term Incentive Plan ("LTIP"). In 2007, the Company's Board of Directors adopted and stockholders approved the 2007 Plan authorizing the Company to grant up to 6,000,000 shares of Common Stock to eligible employees, directors, and consultants in the form of restricted stock, stock options and other types of grants. In 2015, the Company's Board of Directors and stockholders approved an increase of 7,700,000 shares for the 2013 Plan bringing the total number of shares approved under this plan to 10,000,000.

The purpose of the Company's equity compensation plans is to provide for equity awards as part of an overall compensation package of performance-based rewards to attract and retain qualified personnel. Such awards include, without limitation, options, stock appreciation rights, sales or bonuses of restricted stock, restricted stock units or dividend equivalent rights, and an award may consist of one such security or benefit, or two or more of them in any combination or alternative. Vesting of awards may be based upon the passage of time, the occurrence of one or more events, or the satisfaction of performance criteria or other conditions. An aggregate of 9,978,201 shares were granted under both the 2007 and 2013 plans, net of cancellations, and 6,021,799 shares were available for issuance as of December 31, 2016.

Incentive and nonstatutory stock options are granted pursuant to option agreements adopted by the plan administrator. Options generally have 10-year contractual terms and vest in three equal annual installments commencing on the grant date.

The Company estimates the fair value of stock option grants using a Black-Scholes option pricing model. In applying this model, the Company uses the following assumptions:

- *Risk-Free Interest Rate:* The risk-free interest rate is based on the yields of United States Treasury securities with maturities similar to the expected term of the options for each option group.
- *Volatility:* As the Company has a limited trading history for its Common Stock, the expected stock price volatility for its Common Stock was estimated by incorporating two years of the Company's historical volatility and the average historical price volatility for industry peers based on daily price observations over a period equivalent to the expected term of the stock option grants. Industry peers consist of several public companies in the biopharmaceutical industry similar in size, stage of life cycle and financial leverage. The Company's historical volatility is weighted with that of the peer group and that combined historical volatility is weighted 80% with a 20% weighting of the Company's implied volatility, which is obtained from traded options of the Company's stock. The Company intends to continue to consistently apply this process using the same or similar public companies until it has sufficient historical information regarding the volatility of its Common Stock that is consistent with the expected life of the options. Should circumstances change such that the identified companies are no longer similar to the Company, more suitable companies whose share prices are publicly available would be utilized in the calculation.
- *Expected Term:* Due to the limited exercise history of the Company's stock options, the Company determined the expected term based on the Simplified Method under SAB 107 and the expected term for non-employees is the remaining contractual life for both options and warrants.
- *Expected Dividend Rate:* The Company has not paid and does not anticipate paying any cash dividends in the near future.

The fair value of each option award was estimated on the grant date using the Black-Scholes option-pricing model and expensed under the straight line method. Journey issued stock options during the years ended December 31, 2016 and 2015.

The fair value for non-employee stock based awards are marked-to-market on each valuation date until vested using the Black-Scholes pricing model.

The following table summarizes the stock-based compensation expense from stock option, employee stock purchase programs and restricted Common Stock awards and warrants for the years ended December 31, 2016, 2015 and 2014:

($ in thousands)	For the Years Ended December 31, 2016	2015	2014
Employee awards	$ 7,386	$ 8,130	$ 5,492
Executive awards of Fortress Companies' stock	-	2,228	-
Non-employee awards	33	33	54
Fortress Companies (1), (2)	4,709	3,900	-
Total stock-based compensation expense	$ 12,128	$ 14,291	$ 5,546

(1) Consists of approximately $28,000 of Avenue's compensation expenses, approximately $3.9 million of Checkpoint's compensation expense, approximately $0.5 million of JMC's compensation expenses, approximately $0.3 million of Helocyte's compensation expenses, approximately $7,000 of Cellvation's compensation expenses and approximately $42,000 of National Holdings' compensation expenses on stock and option grants for the year ended December 31, 2016

(2) Consists of approximately $50,400 of Avenue's compensation expenses, approximately $3.3 million of Checkpoint's compensation expense, and approximately $0.6 million of JMC's compensation expenses on stock grants for the year ended December 31, 2015.

In February 2016, the Company modified the vesting schedule on the 1.9 million share grant made to its Chief Executive Officer and Executive Chair, Strategic Development in December 2013, and the 3.9 million share inducement grant made to its Executive Chair, Strategic Development in February 2014. The modification extended the vesting on the first tranche of all the grants by twelve months. The impact of the modification was $0.4 million, which will be amortized over the remaining life of the award.

For the years ended December 31, 2016, 2015 and 2014, $4.7 million, $5.8 million and $1.1 million was included in research and development expenses, and $7.4 million, $8.5 million and $4.4 million was included in general and administrative expenses, respectively.

Options

The following table summarizes Fortress stock option activities excluding activities related to Fortress Companies:

	Number of shares	Weighted average exercise price	Total weighted average intrinsic value	Weighted average remaining contractual life (years)
Options vested and expected to vest at December 31, 2015	1,779,365	$ 4.37	$ 666,396	6.32
Forfeited	(648,864)	0.51	-	-
Options vested and expected to vest at December 31, 2016	1,130,501	$ 3.73	$ 602,451	4.93
Exercisable as of December 31, 2016	1,105,501	$ 3.71	$ 602,451	4.91

During the years ended December 31, 2016 and 2015, exercises of stock options resulted in total proceeds of approximately nil and $0.2 million, respectively.

Restricted Stock

Stock-based compensation expense from restricted stock awards and restricted stock units for the years ended December 31, 2016, 2015, 2014 was $9.9 million, $6.9 million and $4.0 million, respectively.

During 2014, the Company granted 4,343,692 restricted shares of its Common Stock to executives, employees and directors of the Company. The fair value of the restricted stock awards issued during 2014 of $11.6 million was estimated on the grant date using the Company's stock price on the date of grant. The 2014 restricted stock awards vest upon both the passage of time as well as meeting certain performance criteria. Restricted stock awards are expensed under the straight line method over the vesting period.

Senior Vice President ("SVP") Grant

On July 15, 2015, the Company's SVP, Biologics Operations, was granted 1.0 million restricted stock units which vest 10% immediately and an additional 10% per year over four years commencing the later of trading availability, under the Company's Insider Trading Policy, or July 15, 2015. The remaining 50% vests in accordance with the achievement of certain performance goals. As a condition of this grant, the SVP surrendered his option grant dated June 2013 for 200,000 shares. On the date of modification, the incremental value of the new award of $3.3 million plus the unamortized expense of the old award of $0.4 million yielded a value of $3.7 million to be amortized over the life of the restricted stock units. For the year ended December 31, 2016 and 2015, 150,000 and

300,000, respectively restricted stock units vested resulting in a charge of $1.9 million on the Consolidated Statements of Operations.

Acceleration of Grants to Former Director

On July 15, 2015, the Board of Directors accelerated the vesting of 133,000 restricted shares of Fortress common stock granted to a former member of the Board of Directors for his service on the Board through July 15, 2015. In connection with this acceleration, Fortress recorded a charge of approximately $0.4 million during 2015 on the Consolidated Statements of Operations.

Restricted Stock Unit Grant to a Current Director

During 2016, the Company granted 1,240,868 restricted shares of its Common Stock to executives and directors of the Company and 641,000 restricted stock units to employees and non-employees of the Company. The fair value of the restricted stock awards issued during 2016 of $3.4 million and the fair value of the restricted stock unit awards issued during 2016 of $1.8 million were estimated on the grant date using the Company's stock price as of the grant date. The 2016 restricted stock awards and restricted stock unit awards vest upon both the passage of time as well as meeting certain performance criteria. Restricted stock awards and restricted stock unit awards are expensed under the straight line method over the vesting period.

On July 15, 2015, a Director joined the Board of Directors. In connection therewith, Fortress granted the Director 50,000 restricted stock units, which vest 25% per year over the next four years. At the grant date, the Director elected to defer 40,000 restricted stock units. The deferral of restricted stock units does not have any impact on the consolidated financial statements.

The following table summarizes Fortress restricted stock awards and restricted stock units activities, excluding activities related to Fortress Companies:

	Number of shares	Weighted average grant price
Unvested balance at December 31, 2015	8,757,935	$ 2.47
Restricted stock granted	1,240,868	2.77
Restricted stock cancelled	(33,333)	2.69
Restricted stock vested	(173,333)	2.73
Restricted stock units granted	641,000	2.93
Restricted stock units cancelled	(111,750)	3.58
Restricted stock units vested	(227,292)	3.56
Unvested balance at December 31, 2016	10,094,095	$ 2.49

As of December 31, 2016, the Company had unrecognized stock-based compensation expense related to all unvested restricted stock and restricted stock unit awards of $4.1 million and $0.9 million, respectively, which is expected to be recognized over the remaining weighted-average vesting period of 2.2 years and 2.0 years, respectively.

Deferred Compensation Plan

On March 12, 2015, the Company's Compensation Committee approved the Deferred Compensation Plan allowing all non-employee directors the opportunity to defer all or a portion of their fees or compensation, including restricted stock and restricted stock units. During the year ended December 31, 2016, certain non-employee directors elected to defer an aggregate of 230,000 restricted stock awards under this plan.

Employee Stock Purchase Plan

Eligible employees can purchase the Company's Common Stock at the end of a predetermined offering period at 85% of the lower of the fair market value at the beginning or end of the offering period. The ESPP is compensatory and results in stock-based compensation expense.

On June 2, 2014, the Company issued 7,139 shares of Common Stock under the ESPP. The shares were issued at $1.45 per share, which represents 85% of the closing price of $1.71 of the Common Stock on June 2, 2014. On December 1, 2014, the Company issued 6,841 shares of Common Stock under the ESPP. The shares were issued at $1.80 per share, which represents 85% of the closing price of $2.12 of the Common Stock on December 1, 2014.

On June 1, 2015, the Company issued 14,681 shares of Common Stock under the ESPP. The shares were issued at $1.80 per share, which represents 85% of the closing price of $2.12 of the Common Stock on December 1, 2014. On December 1, 2015, the Company issued 13,317 shares of Common Stock under the ESPP. The shares were issued at $2.41 per share, which represents 85% of the closing price of $2.84 of the Common Stock on June 1, 2015.

On June 1, 2016, the Company issued 33,958 shares of Common Stock under the ESPP. The shares were issued at $2.40 per share, which represents 85% of the closing price of $2.82 of the Common Stock on May 31, 2016. On December 1, 2016, the Company issued 52,769 shares of Common Stock under the ESPP. The shares were issued at $2.03 per share, which represents 85% of the closing price of $2.39 of the Common Stock on November 30, 2016.

As of December 31, 2016, 177,919 shares have been purchased and 22,081 shares are available for future sale under the Company's ESPP. The Company recognized share-based compensation expense of $0.1 million, $45,000 and $25,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

Warrants

The following table summarizes Fortress warrant activities, excluding activities related to Fortress Companies:

	Number of shares	Weighted average exercise price	Total weighted average intrinsic value	Weighted average remaining contractual life (years)
Outstanding as of December 31, 2015	569,835	$ 6.31	$ 120,700	1.84
Granted	1,880,000	3.00	-	5.65
Expired	(161,382)	6.30	-	-
Exercised (*)	(25,000)	1.37	33,250	-
Outstanding as of December 31, 2016	2,263,453	$ 3.62	$ 79,800	4.74
Exercisable as of December 31, 2016	483,453	$ 5.88	$ 79,800	2.13

(*) - cashless

All stock-based expense in connection with these warrants has been recognized prior to January 1, 2016.

Long-Term Incentive Program ("LTIP")

On July 15, 2015, the stockholders approved the LTIP for the Company's Chairman, President and Chief Executive Officer, Dr. Rosenwald, and Executive Vice Chairman, Strategic Development, Mr. Weiss. The LTIP consists of a program to grant equity interests in the Company and in the Company's subsidiaries, and a performance-based bonus program that is designed to result in performance-based compensation that is deductible without limit under Section 162(m) of the Internal Revenue Code of 1986, as amended.

On July 15, 2015 and on October 31, 2016, the following grants of 500,000 warrants each were made to Dr. Rosenwald and Mr. Weiss for their services to the Company:

2015	**Warrant Shares**	**Risk Free Rate**	**Volatilty**	**Life**	**Exercise price**	**Fair Value**
Mustang	1,000,000	2.36%	106.11%	10	$ 0.147	$ 135
Checkpoint	1,000,000	2.36%	106.11%	10	$ 0.129	$ 118
Avenue	1,000,000	2.36%	106.11%	10	$ 0.146	$ 134
CNDO SO	1,000,000	2.36%	106.11%	10	$ 1.190	$ 1,091
Helocyte	1,000,000	2.36%	106.11%	10	$ 0.097	$ 89
JMC	1,000,000	2.36%	106.11%	10	$ 0.650	$ 596
Escala	1,000,000	2.36%	106.11%	10	$ 0.071	$ 65
2016						
Cellvation	1,000,000	2.86%	70%	9	$ 0.024	$ 18,075

The exercise price, which approximates the fair value, was determined by the Company utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.8%, weighted average cost of capital of 30%, and net of debt utilized.

On January 1, 2016, the Compensation Committee granted 510,434 shares each to Dr. Rosenwald and Mr. Weiss. These equity grants, made in accordance with the LTIP, represent one percent (1%) of total outstanding shares of the Company and were granted in recognition of their performance in 2015. The shares are subject to repurchase by the Company until both of the following conditions are met: (i) the Company's market capitalization increases by a minimum of $100.0 million, and (ii) the employee is either in the service of the Company as an employee or as a Board member (or both) on the tenth anniversary of the LTIP, or the eligible employee has had an involuntary separation from service (as defined in the LTIP). The Company's repurchase option on such shares will also lapse upon the occurrence of a corporate transaction (as defined in the LTIP) if the eligible employee is in service on the date of the corporate transaction. Since these awards contain a market condition as defined in ASC 718**,** *Compensation - Stock Compensation,* the Company valued the award using the Monte Carlo simulation model. The model generated the fair value of the award at the grant date

of $2.8 million for both grants, which is amortized over the vesting period, ten years from the date of the LTIP, subject to the above performance condition being probable of being met. For the year ended December 31, 2016, the Company recorded expense of approximately $0.3 million. No expense was recorded in 2015.

Fortress Companies

Checkpoint Therapeutics, Inc.

Checkpoint has a long term incentive plan. In March 2015, Checkpoint issued a restricted stock grant to Dr. Marasco for services in connection with its Scientific Advisory Board. Dr. Marasco was issued a grant for 1.5 million shares of Checkpoint common stock, which vest 25% on the first anniversary of the grant date and monthly thereafter for 48 months. The Company valued the restricted stock utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.8% and a weighted average cost of capital of 30%, resulting in a value of $0.065 per share on grant date. At December 31, 2015, the Company re-measured this non-employee restricted stock utilizing a market approach, based upon a third party financing. Such valuation resulted in a value of $4.39 per share utilizing a volatility of 83%, a risk free rate of return of 1.5% and a term of five years. At December 31, 2016, the Company re-measured this non-employee restricted stock utilizing a market approach, based upon a third party financing. Such valuation resulted in a value of $5.43 per share utilizing a volatility of 80%, a risk free rate of return of 2.10% and a term of five years. For the years ended December 31, 2016 and 2015, in connection with this grant, Checkpoint re-measured this non-employee grant and recorded expense of approximately $2.5 million and $3.0 million, respectively, in research and development expenses on the Consolidated Statements of Operations.

Certain Checkpoint employees and directors have been awarded restricted stock under Checkpoint's 2015 Incentive Plan. Checkpoint recorded stock-based compensation expense of $1.4 million and $0.3 million, respectively, for the years ended December 31, 2016 and 2015.

During 2016, 60,000 stock options were granted to a consultant under Checkpoint's 2015 Incentive Plan with a $5.43 exercise price and a ten-year life. The stock options were valued using a Black-Scholes model with the following assumptions; volatility of 100.65%, risk free rate of 2.6% and effective life of 10 years. Checkpoint recorded stock-based compensation expense of approximately $5,500 for the year ended December 31, 2016.

Avenue Therapeutics, Inc.

Avenue has a long term incentive program. During 2015, Avenue granted 150,000 shares of its common stock to two consultants in exchange for services provided and 1.0 million shares to its acting Chief Executive Officer, Dr. Lu, who is also Chief Financial Officer of Fortress, for services to be provided. In October 2016, Avenue repurchased 100,000 shares from one of the consultants for $0.176 per share or $17,600 and subsequently retired those shares. The stock price was determined utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.8%, weighted average cost of capital of 30%, and net of debt utilized, resulting in a value of $0.146 per share. Grants issued to the consultants were fully vested. The grant issued to Dr. Lu vests 50% in four annual equal tranches of 12.5%, with the remaining 50% vesting upon the achievement of certain performance goals. In connection with these grants, for the year ended December 31, 2016 and 2015, the Company recorded approximately $14,000 and $29,000, respectively, as general and administrative expenses and approximately $14,000 and $21,000, respectively, as research and development expenses on the Consolidated Statements of Operations.

Journey Medical Corporation

During the year ended December 31, 2016, JMC granted 440,000 of options to its employees. The fair value of stock options granted was determined on the grant date using assumptions for risk free interest rate, the expected term, expected volatility, and expected dividend yield. The stock price was determined utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.2%, weighted average cost of capital of 25.1%, and net of debt utilized, resulting in a value of $0.53 per share at December 31, 2015. The stock price was determined utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 42.7%, weighted average cost of capital of 21.1%, and net of debt utilized, resulting in a value of $0.68 per share at December 31, 2016. JMC does not expect to pay dividends in the foreseeable future. As a result, the expected dividend yield is 0%. The expected term for stock options granted with service conditions represents the average period the stock options are expected to remain outstanding and is based on the expected term calculated using the approach prescribed by the Securities and Exchange Commission's Staff Accounting Bulletin No. 110 for "plain vanilla" options. JMC obtained the risk-free interest rate from publicly available data published by the Federal Reserve. The volatility rate was computed based on a comparison of average volatility rates of similar companies. The fair value of options granted in 2016 was estimated using the following assumptions:

	For the year ended December 31, 2016
Risk-free interest rate	1.14% - 2.25%
Expected dividend yield	-
Expected term in years	5.05 - 6.95
Expected volatility	96.89% - 105.48%

On July 28, 2015, JMC granted 1,950,000 restricted stock units to its key employees. The stock price was determined utilizing a discounted cash flow model to determine the weighted market value of invested capital, discounted by a lack of marketability of 44.5%, weighted average cost of capital of 30%, and net of debt utilized, resulting in a value of $0.65 per share.

On October 19, 2015, JMC repurchased 1,250,000 shares of one employee's unvested restricted awards and replaced the shares with an option grant. On the date of modification, the fair value of the new awards was less than the old awards. Accordingly, the Company will continue to amortize the unamortized expense of the old award of $0.8 million in 2015.

	RSU Grant	Vesting Term	Vested	Forfeited	Unvested	Fair Value per Share
President	1,500,000	4	250,000	(1,250,000)	-	$ 0.650
Sales Operations Staff	450,000	4	116,666	-	333,334	$ 0.650
	1,950,000		366,666	(1,250,000)	333,334	

During the year ended December 31, 2016, stock-based compensation associated with the amortization of stock option expense was approximately $0.4 million. JMC also recorded approximately $85,000 related to the restricted stock during the year ended December 31, 2016. Expense for the year ended December 31, 2015 of approximately $0.6 million was recorded in general and administrative expense on the Consolidated Statements of Operations.

Helocyte, Inc.

On March 30, 2016, Helocyte granted 150,000 shares of restricted stock to a consultant. The shares will vest in four equal annual installments beginning on March 30, 2017. On May 6, 2016, Helocyte granted 508,333 shares of restricted stock to a different consultant. The shares will vest in twelve equal quarterly installments of which 127,084 shares were immediately vested in May 2016. The stock price was determined utilizing a market approach, based upon a third party financing, which resulted in a value of $0.46 per share as of May 31, 2016, utilizing a volatility of 68% and a risk free rate of return of 1.3%. Helocyte remeasured stock price at December 31, 2016, utilizing a volatility of 70% and a risk free rate of return of 1.47%, which resulted in a value of $0.59 per share. For the year ended December 31, 2016, Helocyte re-measured the non-employee grants and recorded expense of approximately $0.2 million, in research and development expenses on the Consolidated Statements of Operations.

On March 30, 2016, Helocyte granted 1.0 million shares to its Chief Executive Officer for services to be provided. The shares vest in twelve equal quarterly installments beginning on June 30, 2016. The fair market value of the stock is $0.097 per share based upon management's estimate of fair value. In connection with this grant, for the year ended December 31, 2016, the Company recorded approximately $55,000, as general and administrative expenses on the Consolidated Statements of Operations.

There were no stock-based compensation expenses recorded in 2015.

Cellvation, Inc.

On October 31, 2016, Cellvation granted 700,000 shares of restricted stock to three consultants. The stock price was determined utilizing a market approach, based upon a third-party 409A valuation, which resulted in a value of $0.024 per share as of September 30, 2016, utilizing a volatility of 70% and a risk free rate of return of 1.1%. For the year ended December 31, 2016, Cellvation the recorded expense of non-employee grants of approximately $2,500, in research and development expenses on the Consolidated Statements of Operations.

On October 31, 2016, Cellvation granted 1,000,000 shares of restricted stock to its interim President and Chief Executive Officer. In connection with this grant, for the year ended December 31, 2016, the Company recorded approximately $4,000, as general and administrative expenses on the Consolidated Statements of Operations.

There were no stock-based compensation expenses recorded in 2015.

Capital Raise

Checkpoint Therapeutics, Inc.

On September 18, 2015, Checkpoint entered into a placement agency agreement with National Securities Corporation (the "Placement Agent") relating to Checkpoint's offering, issuance and sale (the "Offering") to select institutional investors (the "Investors") of units consisting of 10,000 shares of Checkpoint's common stock, $0.0001 par value per share (the "Common Stock"), and warrants (the "Warrants") exercisable for 2,500 shares of common stock at an exercise price of $7.00 per share, for a purchase price of $50,000 per

unit. Pursuant to the agreement, Checkpoint agreed to pay the Placement Agent a cash fee of 10.0% of the gross proceeds from the Offering and granted a warrant exercisable for shares of Checkpoint's common stock equal to 10% of the aggregate number of shares of Checkpoint's common stock sold in the Offering (the "Placement Agent Warrants"). In addition, Checkpoint and the Investors entered into a unit purchase agreement (the "Unit Purchase Agreement") relating to the sale of the Checkpoint's common stock and the warrants in five separate closings during the third and fourth quarter of 2015. In the aggregate, in 2015, Checkpoint closed on gross proceeds of $57.8 million, before commissions and expenses. Net proceeds from this offering were approximately $51.5 million. The financing involved the sale of Units, each consisting of 10,000 shares of common stock and a warrant exercisable for 2,500 shares of common stock at an exercise price of $7.00 per share, for a purchase price of $50,000 per Unit. The warrants have a five-year term and are only exercisable for cash. Checkpoint expects to use the net proceeds primarily for general corporate purposes, which may include financing Checkpoint's growth, developing new or existing product candidates, and funding capital expenditures, acquisitions and investments.

Following this capital raise, the Company's ownership in Checkpoint decreased to 37.7%. Since the Company's ownership of Checkpoint is through Class A Common Shares, which have super-majority voting rights, the Company maintains voting control, thereby consolidating Checkpoint.

On February 23, 2016, Checkpoint closed on gross proceeds of $0.6 million, in a private placement of shares and warrants to Opus Point Healthcare Fund GP, LLC, a fund managed by OPPM, a related party. The financing involved the sale of units, each consisting of 10,000 shares of common stock and a warrant exercisable for 3,500 shares of common stock at an exercise price of $7.00 per share, for a total price of $45,000 per unit. The warrants have a five-year term and are only exercisable for cash. Checkpoint issued 126,640 unregistered shares of common stock and 44,324 warrants in connection with this transaction. Due to the absence of a placement agent in this transaction, the net proceeds to, and warrants issued by, Checkpoint were consistent with terms of the December 2015 third-party financing, which included the payment of fees and issuance of warrants to a placement agent.

As of December 31, 2016, the Company determined that the warrants still did not meet the definition of a derivative and continued to qualify for equity recognition.

Mustang Bio, Inc.

In third and fourth quarter of 2016, Mustang closed on gross proceeds of $39.1 million, before expenses, in a private placement of shares and warrants for which OPN Capital Markets was the placement agent and received a fee of $3.9 million (recorded as contra-equity) or 10% of the gross proceeds. The financing involved the sale of units, each consisting of 10,000 shares of common stock and a warrant exercisable for 2,500 shares of common stock at an exercise price of $8.50 per share, for a total price of $65,000 per unit. The warrants have a five-year term and are only exercisable for cash. Mustang issued 6.0 million unregistered shares of common stock, excluding founder shares, and 1.5 million warrants in connection with this transaction. In addition, the placement agent received 601,486 warrants or 10% of the shares issued.

As of December 31, 2016, the Company determined that the warrants still did not meet the definition of a derivative and continued to qualify for equity recognition.

At Market Offerings

In May 2016, the Company issued 150,556 shares at an average price of $2.89 per share for gross proceeds of $0.4 million under its then existing at the market facility. Fees totaled $79,000.

On August 17, 2016, the Company entered into an Amended and Restated At Market Issuance Sales Agreement, or Sales Agreement, with MLV & Co. LLC, or MLV, and FBR Capital Markets & Co., or FBR. On August 18, 2016, the Company filed a Registration Statement on Form S-3, which became effective on December 1, 2016 and permits the Company to issue and sell shares of its common stock having an aggregate offering price of up to $53.0 million from time to time through MLV and FBR, as sales agents under the Sales Agreement. The Sales Agreement terminates on August 17, 2019.

16. Commitments and Contingencies

Operating Lease Obligations - Fortress (excluding National)

In July 2016, Journey extended its lease for one year for $2,295 square feet of office space in Scottsdale, AZ, at an annual rate of approximately $53,000. Journey took occupancy of this space in November 2014.

In October 2015, the Company entered into a 5-year lease for approximately 6,100 square feet of office space in Waltham, MA at an average annual rent of approximately $0.2 million. The Company took occupancy of this space in January 2016.

On October 3, 2014, the Company entered into a 15-year lease for office space at 2 Gansevoort Street New York, NY 10014, at an average annual rent of $2.7 million. The Company took possession of this space in December 2015, and it became the Company's principal executive office upon occupancy in the first half of 2016. Also, on October 3, 2014, the Company entered into Desk Share Agreements with each of OPPM and TGTX, to occupy 10% and 45%, respectively, of the New York, NY office space that requires them to pay their share of the average annual rent of $0.3 million and $1.1 million, respectively. These initial rent allocations will be adjusted periodically for each party based upon actual percentage of the office space occupied. Additionally, the Company has reserved the right to execute additional desk share agreements with other third parties and those arrangements will also affect the cost of the lease actually borne by us. The lease was executed to further the business strategy, which includes forming additional subsidiaries and/or affiliate companies. Mr. Weiss is Executive Chairman, Chief Executive Officer, President and a stockholder of TGTX. The lease is subject to early termination by the Company, or in circumstances including events of default, the landlord, and includes a five-year extension option in our favor. For the twelve months ended December 31, 2016, the Company recorded $1.3 million of rent expense related to this facility

In December 2012, we assumed a lease from TSO Laboratories, Inc., a wholly owned subsidiary of Ovamed GmbH, for approximately 8,700 square feet of space in Woburn, MA for the purpose of establishing a manufacturing facility for TSO. The term of the lease ends February 28, 2018. The annual rent payment is approximately $0.1 million.

In April 2013, the Company entered into a three-year lease for approximately 1,500 square feet of office space in New York, NY at an average annual rent of approximately $0.1 million. The Company commenced occupancy of this space in May 2013. In March 2014, the Company made the decision to close this New York, NY office and commenced marketing the facility for sub-lease. In April 2014, the Company entered into a sub-lease arrangement for this New York, NY office for the remaining term of the lease, and in December 2014, the sub-tenant returned the space. The lease expired in June 2016.

Pursuant to the Second Amendment and Agreement, dated as of December 21, 2012, by and between the Company and Ovamed (the "Manufacturing Agreement"), in December 2012, the Company entered into an Assignment and Assumption of Lease ("Assignment") with TSO Laboratories, Inc., a wholly owned subsidiary of Ovamed, for approximately 8,700 square feet in Woburn, MA for the purpose of establishing a manufacturing facility. Total rent expense for the five-year lease term was approximately $0.6 million at an average annual rate of $0.1 million. As of December 31, 2013, the Company had spent $0.4 million in leasehold improvement costs associated with this lease. In March 2014, the Company abandoned its plans to build out the Woburn, MA manufacturing facility. As a result, the Company commenced marketing the facility for sub-lease. As of December 31, 2016, the space has not been sublet, and the company continues to seek a sub-tenant.

Total future minimum lease payments under these leases are:

($ in thousands)	
2017	$ 2,806
2018	2,692
2019	2,713
2020	2,754
2021	2,622
Beyond	27,261
Total minimum lease payments	$ 40,848

The Company recognizes rent expense on a straight-line basis over the non-cancellable lease term. Rent expense for the years ended December 31, 2016, 2015 and 2014 was $1.8 million, $0.4 million, and $0.3 million, respectively.

Operating Lease Obligations - National

As of September 30, 2016, National leases office space in various states expiring at various dates through August 2025, and is committed under operating leases for future minimum lease payments as follows (dollars in thousands):

Fiscal Year Ending	Rental Expense	Less, Sublease Income	Net
2017	$ 2,774	$ 84	$ 2,690
2018	2,196	—	2,196
2019	1,524	—	1,524
2020	1,390	—	1,390
2021	1,092	—	1,092
Thereafter	2,232	—	2,232
Total	$ 11,208	$ 84	$ 11,124

Rental expense under all operating leases for the period from September 9, 2016 through September 30, 2016 was approximately $0.2 million. Sublease income under all operating subleases for the period from September 9, 2016 through September 30, 2016 was approximately $8,200.

As of September 30, 2016, National had outstanding three letters of credit, which have been issued in the maximum amount of $0.4 million, as security for property leases, and are collateralized by the restricted cash as reflected in the statements of financial condition.

Indemnification

In accordance with its certificate of incorporation, bylaws and indemnification agreements, the Company has indemnification obligations to its officers and directors for certain events or occurrences, subject to certain limits, while they are serving at the Company's request in such capacity. There have been no claims to date, and the Company has director and officer insurance to address such claims. Pursuant to agreements with clinical trial sites, the Company provides indemnification to such sites in certain conditions.

Legal Proceedings

Fortress

In the ordinary course of business, the Company and its subsidiaries may be subject to both insured and uninsured litigation. Suits and claims may be brought against the Company by customers, suppliers, partners and/or third parties (including tort claims for personal injury arising from clinical trials of the Company's product candidates and property damage) alleging deficiencies in performance, breach of contract, etc., and seeking resulting alleged damages.

On August 1, 2016, the Company entered into a Settlement and Forbearance Agreement with Ovamed to settle contractual obligations of approximately $1.9 million. Under the terms of the agreement, within ten days of execution of the agreement, the Company paid $1.1 million during the third quarter of 2016, to be followed in nine months by a second payment of $0.8 million. The combined settlement amount reflects a payment of an obligation previously recorded by the Company.

Mustang and Fortress

On January 15, 2016, Dr. Winson Tang ("Plaintiff") filed a Complaint against Dr. Rosenwald, Mr. Weiss, Mustang, Fortress, and others in the Superior Court of the State of California, County of Los Angeles (Winson Tang v. Lindsay Rosenwald et al., Case No. BC607346). As amended, the complaint alleges that Dr. Tang was a third-party beneficiary of Mustang's Exclusive License Agreement with COH and should be declared the owner of 15% of Mustang's outstanding shares. After Fortress, Mustang and other defendants demurred, the Court sustained the demurrer and dismissed all claims without prejudice on September 13, 2016. Dr. Tang filed his second amended complaint on October 11, 2016, and the court again sustained the demurrer without prejudice, except for a claim for declaratory relief against Mustang. Subsequently, Dr. Tang agreed to narrow his claims and drop certain defendants from the case. Dr. Tang filed his third amended complaint on January 17, 2017, alleging one claim for declaratory relief against Mustang and two claims for breach of contract against certain other defendants. The parties are proceeding with discovery, and the case is set for a case management conference on March 15, 2017.

As of December 31, 2016, neither Fortress nor Mustang has accrued any losses in connection with this litigation as both believe that Plaintiff's claims are without merit and intend to vigorously defend this lawsuit. Even in the event of an adverse determination, Fortress and Mustang intend to satisfy any judgment from sources other than newly issued shares of the Company or Mustang, in order to prevent dilution.

Litigation and Regulatory Matters - National

National is a defendant or respondent in various pending and threatened arbitrations, administrative proceedings and lawsuits seeking compensatory damages. Several cases have no stated alleged damages. Claim amounts are infrequently indicative of the actual amounts National will be liable for, if any. Further, National has a history of collecting amounts awarded in these types of matters from its brokers that are still affiliated, as well as from those that are no longer affiliated. Many of these claimants also seek, in addition to compensatory damages, punitive or treble damages, and all seek interest, costs and fees. These matters arise in the normal course of business. National intends to vigorously defend itself in these actions, and the ultimate outcome of these matters cannot be determined at this time.

Liabilities for potential losses from complaints, legal actions, government investigations and proceedings are established where management believes that it is probable that a liability has been incurred and the amount of loss can be reasonably estimated. In making these decisions, management bases its judgments on its knowledge of the situations, consultations with legal counsel and its historical experience in resolving similar matters. In many lawsuits, arbitrations and regulatory proceedings, it is not possible to determine whether a liability has been incurred or to estimate the amount of that liability until the matter is close to resolution. However, accruals are reviewed regularly and are adjusted to reflect management's estimates of the impact of developments, rulings, advice of counsel and any other information pertinent to a particular matter. Because of the inherent difficulty in predicting the ultimate outcome of legal and regulatory actions, management cannot predict with certainty the eventual loss or range of loss related to such matters. These amounts are included in accounts payable and other accrued expenses in the statements of financial condition. Awards ultimately paid, if any, may be covered by our errors and omissions insurance policy. While National will vigorously defend itself in these matters, and will assert insurance coverage and indemnification to the maximum extent possible, there can be no assurance that such matters will not have a material adverse impact on our financial position, results of operations or cash flows. National has included in "Professional fees" litigation and FINRA related expenses of $0.2 million for the period from September 9, 2016 through September 30, 2016.

17. Employee Benefit Plan

Fortress Biotech, Inc.

On January 1, 2008, the Company adopted a defined contribution 401(k) plan which allows employees to contribute up to a percentage of their compensation, subject to IRS limitations and provides for a discretionary Company match up to a maximum of 4% of employee compensation. For the years ended December 31, 2016, 2015 and 2014, the Company paid a matching contribution of $0.2 million, $0.1 million and $83,000, respectively.

National Holdings Corporation

In September 2011, National created a new defined contribution 401(k) plan (the "Plan") merging the two plans originally formed prior to the merger of National and vFinance effective October 1, 2011. Under the Plan, employees can elect to defer up to 75% of eligible compensation, subject to certain limitations, by making voluntary contributions to the Plan. National's contributions are made at the discretion of the Board of Directors. For the period from September 9, 2016 through September 30, 2016 National made no contributions to the plan.

18. Related Party Transactions

Other Related Parties

The Company's Chairman, President and Chief Executive Officer, individually and through certain trusts over which he has voting and dispositive control, beneficially owned approximately 12.3%, 12.2% and 12.4% of the Company's issued and outstanding Common Stock as of December 31, 2016, 2015 and 2014. The Company's Executive Vice Chairman, Strategic Development individually owns approximately 14.5%, 14.8% and 14.9% of the Company's issued and outstanding Common Stock at December 31, 2016, 2015 and 2014.

Service Agreement with Opus Point Management Partners, LLC

On April 3, 2014, the Company entered into a Shared Services Agreement with OPPM in which the parties agreed to share a rented facility as well as costs for certain services, which they individually require for the operation of their respective entities. The Company's Chairman, President and Chief Executive Officer and the Company's Executive Vice President, Strategic Development, are both Co-Portfolio Managers and Partners of OPPM. The Company incurred expense of approximately $84,000, $24,000 and $0.1 million for the years ended December 31, 2016, 2015 and 2014, respectively. This agreement was terminated April 30, 2016 by Fortress as the Company took occupancy of our new office space in April 2016.

Shared Services Agreement with TGTX

In July 2015, TGTX and the Company entered into an arrangement to share the cost of certain research and development employees. The Company's Executive Vice Chairman, Strategic Development, is Executive Chairman and Interim Chief Executive Officer of TGTX. Under the terms of the Agreement, TGTX will reimburse the Company for the salary and benefit costs associated with these employees based upon actual hours worked on TGTX related projects. For the year ended December 31, 2016, the Company invoiced TGTX $0.8 million. The Company received payments of $71,800 for the year ended December 31, 2016.

Desk Share Agreements with TGTX and OPPM

In September 2014, the Company entered into Desk Share Agreements with OPPM and TGTX to occupy 20% and 40% of the New York, NY office space that requires TGTX and OPPM to pay their share of the average annual rent of $0.5 million and $1.1 million, respectively. These initial rent allocations will be adjusted periodically for each party based upon actual percentage of the office space occupied. Additionally, the Company has reserved the right to execute desk share agreements with other third parties and those arrangements will also affect the cost of the lease actually borne by the Company. The Desk Share Agreement was amended in May 2016, adjusting the initial rent allocations to 45% for TGTX and 10% for OPPM.

Each initial Desk Share Agreement has a term of five years. The Company took possession of the New York, NY office space in December 2015, commenced build out of the space shortly thereafter and took occupancy of the space in April 2016. The Company expects the total build out costs to approximate $5.1 million and will share the costs with OPPM and TGTX under the Desk Space Agreements. As of December 31, 2016, the Company had paid $1.0 million in rent under the Desk Space Agreements, and invoiced OPPM and TGTX approximately $95,000 and $0.4 million, respectively, for their prorated share of the rent base. In addition, as of December 31, 2016 the Company had incurred $4.8 million in connection with the build out of the space and recorded a receivable of $2.1 million due from TGTX and $0.5 million due from OPPM.

Checkpoint Collaborative Agreements with TGTX

Checkpoint has entered into various agreements with TGTX to develop and commercialize certain assets in connection with its licenses, including a collaboration agreement for some of the Dana Farber licensed antibodies, an option agreement and sponsored research agreement for compounds licensed from NeuPharma, and a sublicense agreement for the Jubilant family of patents. Checkpoint believes that by partnering with TGTX to develop these compounds in therapeutic areas outside of its business focus, it may substantially offset its preclinical costs and milestone costs related to the development and marketing of these compounds in solid tumor indications.

Opus Credit Facility

On September 14, 2016, Fortress entered the Opus Credit Facility with OPHIF. Since Fortress's Chairman, President and Chief Executive Officer and Fortress's Executive Vice President, Strategic Development, are Co-Portfolio Managers and Partners of Opus, an affiliate of OPHIF, all of the disinterested directors of Fortress's board of directors approved the terms of the Credit Facility Agreement and accompanying Pledge and Security Agreement and forms of Note and Warrant.

Founders Agreement and Management Services Agreement with Checkpoint

Effective March 17, 2015, the Company entered into a Founders Agreement with Checkpoint, which was amended and restated on July 11, 2016 (the "Checkpoint Founders Agreement"). The Checkpoint Founders Agreement provides that, in exchange for the time and capital expended in the formation of Checkpoint and the identification of specific assets the acquisition of which result in the formation of a viable emerging growth life science company, Checkpoint assumed $2.8 million in debt (see Note 11) that the Company accumulated under the NSC Note for expenses and costs of forming Checkpoint, and Checkpoint shall also: (i) issue annually to the Company, on the anniversary date of the Checkpoint Founders Agreement, shares of common stock equal to 2.5% of the fully-diluted outstanding equity of Checkpoint at the time of issuance; (ii) pay an equity fee in shares of common stock, payable within five (5) business days of the closing of any equity or debt financing for Checkpoint or any of its subsidiaries that occurs after the effective date of the Checkpoint Founders Agreement and ending on the date when the Company no longer has majority voting control in Checkpoint's voting equity, equal to 2.5% of the gross amount of any such equity or debt financing; and (iii) pay a cash fee equal to 4.5% of Checkpoint's annual net sales, payable on an annual basis, within ninety (90) days of the end of each calendar year. In the event of a change in control (as it is defined in the Checkpoint Founders Agreement), Checkpoint will pay a one-time change in control fee equal to five times (5x) the product of (i) net sales for the twelve (12) months immediately preceding the change in control and (ii) four and one-half percent (4.5%). The Checkpoint Founders Agreement has a term of fifteen years after which it automatically renews for one-year periods unless the Company gives Checkpoint notice of termination. The Checkpoint Founders Agreement will automatically terminate upon a change of control.

Effective March 17, 2015, the Company entered into a Management Services Agreement (the "Checkpoint MSA") with Checkpoint and each of Checkpoint's current directors and officers who are directors or officers of the Company to provide services to Checkpoint pursuant to the terms of the Checkpoint MSA. Pursuant to the terms of the Checkpoint MSA, for a period of five (5) years, the Company will render advisory and consulting services to Checkpoint. Services provided under the Checkpoint MSA may include, without limitation, (i) advice and assistance concerning any and all aspects of Checkpoint's operations, clinical trials, financial

planning and strategic transactions and financings and (ii) conducting relations on behalf of Checkpoint with accountants, attorneys, financial advisors and other professionals (collectively, the "Services"). Checkpoint is obligated to utilize clinical research services, medical education, communication and marketing services and investor relations/public relation services of companies or individuals designated by Fortress, provided those services are offered at market prices. However, Checkpoint is not obligated to take or act upon any advice rendered from Fortress and Fortress shall not be liable for any of Checkpoint's actions or inactions based upon their advice. Fortress and its affiliates, including all members of Fortress' Board of Directors, have been contractually exempt from fiduciary duties to Checkpoint relating to corporate opportunities. In consideration for the Services, the Company will pay Fortress an annual consulting fee of $0.5 million (the "Annual Consulting Fee"), payable in advance in equal quarterly installments on the first business day of each calendar quarter in each year, provided, however, that such Annual Consulting Fee shall be increased to $1.0 million for each calendar year in which Checkpoint has net assets in excess of $100.0 million at the beginning of the calendar year.

Founders Agreement and Management Services Agreement with Avenue

Effective as of February 17, 2015, the Company entered into a Founders Agreement with Avenue, which was amended and restated on September 13, 2016 (the "Avenue Founders Agreement"), pursuant to which the Company assigned to Avenue all of its rights and interest under the Company's license agreement with Revogenex for IV Tramadol. As consideration for the Avenue Founders Agreement, Avenue assumed $3.0 million in debt that the Company accumulated under the NSC Note (see Note 11) for expenses and costs of forming Avenue and obtaining IV Tramadol license, of which $3.0 million represents the acquisition of the License Agreement. The Avenue Founders Agreement has a term of 15 years, which upon expiration automatically renews for successive one-year periods unless terminated by the Company or a Change in Control (as defined in the Avenue Founders Agreement) occurs. Concurrently with the amendment and restatement of the Avenue Founders Agreement, the Company entered into an Exchange Agreement whereby the Company exchanged its 7.0 million Class A Common shares for approximately 7.5 million common shares and 250,000 Class A Preferred shares. Class A Preferred Stock is identical to common stock other than as to voting rights, conversion rights, election of directors and the PIK Dividend right (as described below). Each share of Class A Preferred Stock will be entitled to vote the number of votes that is equal to one and one-tenth (1.1) times a fraction, the numerator of which is the sum of (A) the shares of outstanding Avenue common stock and (B) the whole shares of Avenue common stock into which the shares of outstanding Class A Preferred Stock are convertible and the denominator of which is the number of shares of outstanding Class A Preferred Stock. Thus, the Class A Preferred Stock will at all times constitute a voting majority. Each share of Class A Preferred Stock is convertible, at its option, into one fully paid and nonassessable share of Avenue common stock, subject to certain adjustments. For a period of 10 years from the date of the first issuance of Class A Preferred Stock, the holders of record of shares of Class A Preferred Stock, exclusively and as a separate class, are entitled to appoint or elect the majority of Avenue's Board of Directors. As holders of Class A Preferred Stock, the Company will receive on each February 17 (each a "PIK Dividend Payment Date") until the date all outstanding Class A Preferred Stock is converted into common stock or redeemed (and the purchase price is paid in full), pro rata per share dividends paid in additional fully paid and nonassessable shares of common stock ("PIK Dividends") such that the aggregate number of shares of common stock issued pursuant to such PIK Dividend is equal to two and one-half percent (2.5%) of Avenue's fully-diluted outstanding capitalization on the date that is one (1) business day prior to any PIK Dividend Payment Date. As additional consideration for the transfer of rights under the Avenue Founders Agreement, Avenue will also: (i) pay an equity fee in shares of Avenue common stock, payable within five (5) business days of the closing of any equity or debt financing for Avenue or any of its respective subsidiaries that occurs after the effective date of the Avenue Founders Agreement and ending on the date when Fortress no longer has majority voting control in Avenue's voting equity, equal to two and one half percent (2.5%) of the gross amount of any such equity or debt financing; and (ii) pay a cash fee equal to four and one half percent (4.5%) of Avenue's annual net sales, payable on an annual basis, within ninety (90) days of the end of each calendar year. In the event of a Change in Control, the Company will pay a one-time change in control fee equal to five (5x) times the product of (i) net sales for the twelve (12) months immediately preceding the change in control and (ii) four and one-half percent (4.5%).

Effective as of February 17, 2015, the Company entered into a Management Services Agreement (the "Avenue MSA") with Avenue and each of Avenue's current directors and officers who are directors or officers of the Company to provide services to Avenue pursuant to the terms of the Avenue MSA. Pursuant to the terms of the Avenue MSA, for a period of five (5) years, the Company will render advisory and consulting services to Avenue. Services provided under the Avenue MSA may include, without limitation, (i) advice and assistance concerning any and all aspects of Avenue's operations, clinical trials, financial planning and strategic transactions and financings and (ii) conducting relations on behalf of Avenue with accountants, attorneys, financial advisors and other professionals (collectively, the "Services"). Avenue is obligated to utilize clinical research services, medical education, communication and marketing services and investor relations/public relation services of companies or individuals designated by Fortress, provided those services are offered at market prices. However, Avenue is not obligated to take or act upon any advice rendered from Fortress and Fortress shall not be liable for any of Avenue's actions or inactions based upon their advice. Fortress and its affiliates, including all members of Fortress' Board of Directors, have been contractually exempt from fiduciary duties to Avenue relating to corporate opportunities. In consideration for the Services, the Company will pay Fortress an annual consulting fee of $0.5 million (the "Annual Consulting Fee"), payable in advance in equal quarterly installments on the first business day of each calendar quarter in each year, provided, however, that such Annual Consulting Fee shall be increased to $1.0 million for each calendar year in which Avenue has net assets in excess of $100.0 million at the beginning of the calendar year.

Founders Agreement and Management Services Agreement with Helocyte

Effective March 20, 2015, the Company entered into a Founders Agreement with Helocyte, which was amended and restated as of September 14, 2016 (the "Helocyte Founders Agreement"), pursuant to which the Company agreed to provide the initial funding required by the COH License Agreement for PepVax and Triplex, as well as other operating capital needed to meet Helocyte's initial capital requirements. As consideration for the Helocyte Founders Agreement, upon Helocyte commencing a third party financing, Helocyte will assume the Company's accumulated debt, attributable to Helocyte's expenses and costs associated with its formation, license acquisition and expenses, under the NSC Note ("NSC Note"), or other similar debt. The Helocyte Founders Agreement has a term of 15 years, which upon expiration automatically renews for successive one-year periods unless terminated by the Company or a Change in Control (as defined in the Helocyte Founders Agreement) occurs. Concurrently with the amendment and restatement of the Helocyte Founders Agreement, the Company entered into an Exchange Agreement whereby the Company exchanged its 7.0 million Class B Common shares for 6.75 million common shares and 250,000 Class A Preferred shares. Class A Preferred Stock is identical to common stock other than as to voting rights, conversion rights and the PIK Dividend right (as described below). Each share of Class A Preferred Stock will be entitled to vote the number of votes that is equal to one and one-tenth (1.1) times a fraction, the numerator of which is the sum of (A) the shares of outstanding Helocyte common stock and (B) the whole shares of Helocyte common stock into which the shares of outstanding Class A Common Stock and Class A Preferred Stock are convertible and the denominator of which is the number of shares of outstanding Class A Preferred Stock. Thus, the Class A Preferred Stock will at all times constitute a voting majority. Each share of Class A Preferred Stock is convertible, at its option, into one fully paid and nonassessable share of Helocyte common stock, subject to certain adjustments. As the sole holder of Class A Preferred Stock, the Company will receive on each March 20 (each a "PIK Dividend Payment Date") until the date all outstanding Class A Preferred Stock is converted into common stock or redeemed (and the purchase price is paid in full), pro rata per share dividends paid in additional fully paid and nonassessable shares of common stock ("PIK Dividends") such that the aggregate number of shares of common stock issued pursuant to such PIK Dividend is equal to two and one-half percent (2.5%) of Helocyte's fully-diluted outstanding capitalization on the date that is one (1) business day prior to any PIK Dividend Payment Date. As additional consideration for the transfer of rights under the Helocyte Founders Agreement, Helocyte will also: (i) pay an equity fee in shares of Helocyte common stock, payable within five (5) business days of the closing of any equity or debt financing for Helocyte or any of its respective subsidiaries that occurs after the effective date of the Helocyte Founders Agreement and ending on the date when Fortress no longer has majority voting control in Helocyte's voting equity, equal to two and one half percent (2.5%) of the gross amount of any such equity or debt financing; and (ii) pay a cash fee equal to four and one half percent (4.5%) of Helocyte's annual net sales, payable on an annual basis, within ninety (90) days of the end of each calendar year. In the event of a Change in Control, the Company will pay a one-time change in control fee equal to five (5x) times the product of (i) net sales for the twelve (12) months immediately preceding the change in control and (ii) four and one-half percent (4.5%).

Effective March 20, 2015, the Company entered into a Management Services Agreement (the "Helocyte MSA") with Helocyte and each of Helocyte's current directors and officers who are directors or officers of the Company to provide services to Helocyte pursuant to the terms of the Helocyte MSA. Pursuant to the terms of the Helocyte MSA, for a period of five (5) years, the Company will render advisory and consulting services to Helocyte. Services provided under the Helocyte MSA may include, without limitation, (i) advice and assistance concerning any and all aspects of Helocyte's operations, clinical trials, financial planning and strategic transactions and financings and (ii) conducting relations on behalf of Helocyte with accountants, attorneys, financial advisors and other professionals (collectively, the "Services"). Helocyte is obligated to utilize clinical research services, medical education, communication and marketing services and investor relations/public relation services of companies or individuals designated by Fortress, provided those services are offered at market prices. However, Helocyte is not obligated to take or act upon any advice rendered from Fortress and Fortress shall not be liable for any of Helocyte's actions or inactions based upon their advice. Fortress and its affiliates, including all members of Fortress' Board of Directors, have been contractually exempt from fiduciary duties to Helocyte relating to corporate opportunities. In consideration for the Services, the Company will pay Fortress an annual consulting fee of $0.5 million (the "Annual Consulting Fee"), payable in advance in equal quarterly installments on the first business day of each calendar quarter in each year, provided, however, that such Annual Consulting Fee shall be increased to $1.0 million for each calendar year in which Helocyte has net assets in excess of $100.0 million at the beginning of the calendar year.

Founders Agreement and Management Services Agreement with Mustang

Effective March 13, 2015, the Company entered a Founders Agreement with Mustang, which was amended and restated on May 17, 2016 and again on July 26, 2016 (the "Mustang Founders Agreement"). The Mustang Founders Agreement provides that, in exchange for the time and capital expended in the formation of Mustang and the identification of specific assets the acquisition of which result in the formation of a viable emerging growth life science company, the Company will loan Mustang $2.0 million, representing the up-front fee required to acquire Mustang's license agreement with COH. The Mustang Founders Agreement has a term of 15 years, which upon expiration automatically renews for successive one-year periods unless terminated by the Company or a Change in Control (as defined in the Mustang Founders Agreement) occurs. Concurrently with the second amendment to the Mustang Founders Agreement, the Company entered into an Exchange Agreement whereby the Company exchanged its 7.25 million Class B Common shares for 7.0 million common shares and 250,000 Class A Preferred shares. Class A Preferred Stock is identical to common stock other than as to voting rights, conversion rights and the PIK Dividend right (as described below). Each share of Class A Preferred Stock will be entitled to vote the number of votes that is equal to one and one-tenth (1.1) times a fraction, the numerator of which is the sum of (A) the shares of outstanding Mustang common stock and (B) the whole shares of Mustang common stock into which the shares of outstanding Class A Common Stock and Class A Preferred Stock are convertible and the denominator of which is the number of shares of outstanding Class A Preferred Stock. Thus, the Class A Preferred Stock will at all times constitute a voting

majority. Each share of Class A Preferred Stock is convertible, at the Company's option, into one fully paid and nonassessable share of Mustang common stock, subject to certain adjustments. As holders of Class A Preferred Stock, the Company will receive on each March 13 (each a "PIK Dividend Payment Date") until the date all outstanding Class A Preferred Stock is converted into common stock or redeemed (and the purchase price is paid in full), pro rata per share dividends paid in additional fully paid and nonassessable shares of common stock ("PIK Dividends") such that the aggregate number of shares of common stock issued pursuant to such PIK Dividend is equal to two and one-half percent (2.5%) of Mustang's fully-diluted outstanding capitalization on the date that is one (1) business day prior to any PIK Dividend Payment Date.

As additional consideration under the Mustang Founders Agreement, Mustang will also: (i) pay an equity fee in shares of common stock, payable within five (5) business days of the closing of any equity or debt financing for Mustang or any of its respective subsidiaries that occurs after the effective date of the Mustang Founders Agreement and ending on the date when the Company no longer has majority voting control in Mustang's voting equity, equal to two and one-half (2.5%) of the gross amount of any such equity or debt financing; and (ii) pay a cash fee equal to four and one-half percent (4.5%) of Mustang's annual net sales, payable on an annual basis, within ninety (90) days of the end of each calendar year. In the event of a Change in Control, Mustang will pay a one-time change in control fee equal to five (5x) times the product of (A) net sales for the twelve (12) months immediately preceding the change in control and (B) four and one-half percent (4.5%).

Effective as of March 13, 2015, the Company entered into a Management Services Agreement (the "Mustang MSA") with Mustang. Pursuant to the terms of the Mustang MSA, for a period of five (5) years, the Company will render advisory and consulting services to Mustang. Services provided under the Mustang MSA may include, without limitation, (i) advice and assistance concerning any and all aspects of Mustang's operations, clinical trials, financial planning and strategic transactions and financings and (ii) conducting relations on behalf of Mustang with accountants, attorneys, financial advisors and other professionals (collectively, the "Services"). Mustang is obligated to utilize clinical research services, medical education, communication and marketing services and investor relations/public relation services of companies or individuals designated by Fortress, provided those services are offered at market prices. However, Mustang is not obligated to take or act upon any advice rendered from Fortress, and Fortress shall not be liable for any of Mustang's actions or inactions based upon Fortress's advice. Fortress and its affiliates, including all members of Fortress' Board of Directors, have been contractually exempt from fiduciary duties to Mustang relating to corporate opportunities. In consideration for the Services, Mustang will pay Fortress an annual consulting fee of $0.5 million (the "Annual Consulting Fee"), payable in advance in equal quarterly installments on the first business day of each calendar quarter in each year, provided, however, that such Annual Consulting Fee shall be increased to $1.0 million for each calendar year in which Mustang has net assets in excess of $100.0 million at the beginning of the calendar year.

As consideration for the Mustang Founders Agreement, Mustang assumed $3.6 million in debt that the Company accumulated under the NSC Note on July 5, 2016.

Founders Agreement and Management Services Agreement with Cellvation

Effective October 31, 2016, the Company entered into a Founders Agreement with Cellvation (the "Cellvation Founders Agreement"). The Cellvation Founders Agreement provides that, in exchange for the time and capital expended in the formation of Cellvation and the identification of specific assets the acquisition of which result in the formation of a viable emerging growth life science company, the Company will loan Cellvation $0.2 million, representing the up-front fee required to acquire Cellvation's license agreement and continue to fund Cellvation's working capital needs. The Cellvation Founders Agreement has a term of 15 years, which, upon expiration, automatically renews for successive one-year periods unless terminated by the Company or a Change in Control (as defined in the Cellvation Founders Agreement) occurs. Pursuant to the Cellvation Founders Agreement, the Company received 7.6 million common shares and 250,000 Class A Preferred shares. Class A Preferred Stock is identical to common stock other than as to voting rights, conversion rights and the PIK Dividend right (as described below). Each share of Class A Preferred Stock will be entitled to vote the number of votes that is equal to one and one-tenth (1.1) times a fraction, the numerator of which is the sum of (A) the shares of outstanding Cellvation common stock and (B) the whole shares of Cellvation common stock into which the shares of outstanding Class A Preferred Stock are convertible and the denominator of which is the number of shares of outstanding Class A Preferred Stock. Thus, the Class A Preferred Stock will at all times constitute a voting majority. Each share of Class A Preferred Stock is convertible, at the Company's option, into one fully paid and nonassessable share of Cellvation common stock, subject to certain adjustments. As holders of Class A Preferred Stock, the Company will receive on each October 31 (each a "PIK Dividend Payment Date") until the date all outstanding Class A Preferred Stock is converted into common stock or redeemed (and the purchase price is paid in full), pro rata per share dividends paid in additional fully paid and nonassessable shares of common stock ("PIK Dividends") such that the aggregate number of shares of common stock issued pursuant to such PIK Dividend is equal to two and one-half percent (2.5%) of Cellvation's fully-diluted outstanding capitalization on the date that is one (1) business day prior to any PIK Dividend Payment Date.

As additional consideration under the Cellvation Founders Agreement, Cellvation will also: (i) pay an equity fee in shares of common stock, payable within five (5) business days of the closing of any equity or debt financing for Cellvation or any of its respective subsidiaries that occurs after the effective date of the Cellvation Founders Agreement and ending on the date when the Company no longer has majority voting control in Cellvation's voting equity, equal to two and one-half (2.5%) of the gross amount of any such equity or debt financing; and (ii) pay a cash fee equal to four and one-half percent (4.5%) of Cellvation's annual net sales, payable on

an annual basis, within ninety (90) days of the end of each calendar year. In the event of a Change in Control, Cellvation will pay a one-time change in control fee equal to five (5x) times the product of (A) net sales for the twelve (12) months immediately preceding the change in control and (B) four and one-half percent (4.5%).

Effective October 31, 2016, the Company entered into a Management Services Agreement (the "Cellvation MSA") with Cellvation. Pursuant to the terms of the Cellvation MSA, for a period of five (5) years, the Company will render advisory and consulting services to Cellvation. Services provided under the Cellvation MSA may include, without limitation, (i) advice and assistance concerning any and all aspects of Cellvation's operations, clinical trials, financial planning and strategic transactions and financings and (ii) conducting relations on behalf of Cellvation with accountants, attorneys, financial advisors and other professionals (collectively, the "Services"). Cellvation is obligated to utilize clinical research services, medical education, communication and marketing services and investor relations/public relation services of companies or individuals designated by Fortress, provided those services are offered at market prices. However, Cellvation is not obligated to take or act upon any advice rendered from Fortress, and Fortress shall not be liable for any of Cellvation's actions or inactions based upon Fortress's advice. Fortress and its affiliates, including all members of Fortress' Board of Directors, have been contractually exempt from fiduciary duties to Cellvation relating to corporate opportunities. In consideration for the Services, Cellvation will pay Fortress an annual consulting fee of $0.5 million (the "Annual Consulting Fee"), payable in advance in equal quarterly installments on the first business day of each calendar quarter in each year, provided, however, that such Annual Consulting Fee shall be increased to $1.0 million for each calendar year in which Cellvation has net assets in excess of $100.0 million at the beginning of the calendar year.

Fees and Stock Grants Received by Fortress

Fees recorded in connection with the Company's agreements with its subsidiaries are eliminated in consolidation. These include management services fees, issuance of common shares of Fortress Companies in connection with third party raises and annual stock dividend or issuances on the anniversary date of respective Founders Agreements.

Chord Advisors, LLC

In May 2015, we entered into a full service consulting agreement with Chord Advisors, LLC ("Chord") to provide advisory accounting services to the Company. Under the terms of the agreement, we pay Chord $10,000 per month to provide technical accounting and financial reporting support. Either party upon 30-days written notice can terminate the agreement. Mr. Horin, Managing Partner of Chord, serves as Interim Chief Financial Officer, to Avenue, Helocyte and Mustang, and until December 15, 2016, served as Interim Chief Financial Officer to Checkpoint. Pursuant to the agreements with Avenue, and Helocyte, Chord receives $5,000 per month and, pursuant to the agreement with Mustang, receives $7,500 per month, to provide back office accounting support and accounting policy and financial reporting services, including the services of Mr. Horin. Checkpoint utilizes Chord on an hourly basis for technical accounting issues that may arise.

National

In September 2016, pursuant to the terms of the Merger Agreement between National and Fortress, the Company acquired 56.1% of National for $22.9 million, thereby becoming the majority shareholder of National. The Company's Executive Vice Chairman, Strategic Development is the Chairman of the Board of National. In the normal course, National provides the Company and the Company's subsidiaries with placement agent services in connection with third party raises. For the 20 day period ended September 30, 2016, National received fees of $1.3 million. The fees earned in 2016 relate to Mustang offerings, while the fees earned in 2015 relate to Checkpoint offerings.

Additionally, the Company's Chairman, President and Chief Executive Officer and the Company's Executive Vice Chairman, Strategic Development are both Co-Portfolio Managers and Partners of OPPM which owns approximately 4.6% of National.

19. Income Taxes

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards.

The significant components of the Company's deferred taxes consist of the following:

	As of December 31,	
	2016	2015
Deferred tax assets:		
Net operating loss carryforwards	$ 76,486	$ 54,249
Amortization of up-front fees	7,277	4,442
Amortization of in-process R&D	742	599
Stock compensation	10,899	8,158
Accruals and reserves	4,025	210
Tax Credits	6,305	4,583
Start Up Costs	98	–
Unrealized loss on investments	1,095	358
Total deferred tax assets	106,927	72,599
Less valuation allowance	(94,688)	(66,730)
Net deferred tax assets	$ 12,239	$ 5,869
Deferred tax liabilities:		
Intangibles	$ (4,449)	$ –
Basis in subsidiary	(7,790)	(5,869)
Total deferred tax assets, net	$ -	$ -

A reconciliation of the statutory tax rates and the effective tax rates is as follows:

	For the Year Ended December 31,		
	2016	2015	2014
Percentage of pre-tax income:			
U.S. federal statutory income tax rate	35%	35%	35%
State taxes, net of federal benefit	3%	5%	5%
Credits	2%	1%	6%
Non-deductible items	(4)%	-%	(1)%
Provision to return	2%	-%	-%
Stock based compensation shortfall	(2)%	(1)%	-%
Other	-%	1%	-%
Change in valuation allowance	(33)%	(44)%	(45)%
Change in subsidiary basis	(3)%	3%	-%
Effective income tax rate	-%	-%	-%

ASC 740 requires a valuation allowance to reduce the deferred tax assets reported if, based on the weight of all positive and negative evidence, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. Realization of the deferred tax assets is substantially dependent on the Company's ability to generate sufficient taxable income within certain future periods. Management has considered the Company's history of cumulative tax and book losses incurred since inception, and the other positive and negative evidence, and has concluded that it is more likely than not that the Company will not realize the benefits of the net deferred tax assets as of December 31, 2015 and December 31, 2016. Accordingly, a full valuation allowance has been established against the net deferred tax assets as of December 31, 2015 and December 31, 2016. The valuation allowance increased by a net $28.0 million during the current year.

The Company has incurred net operating losses ("NOLs") since inception. At December 31, 2016, the Company had federal NOLs of $197.5 million, which will begin to expire in the year 2020, state NOLs of $189.5 million, which will begin to expire in 2022, and federal income tax credits of $6.3 million, which will begin to expire in 2028. The utilization of the Company's NOLs and tax credit carryovers are subject to annual Internal Revenue Code Section 382 limitations (382 Limitations) due to the ownership changes incurred by the Company on April 26, 2010 and June 27, 2012 (similar state provisions apply to state loss carryovers). Based on the analysis of the NOLs and tax credit carryovers subject to the 382 Limitations, the Company has concluded that the 382 Limitations would not prevent the Company from utilizing all of its NOLs and tax credit carryovers before expiration.

As of December 31, 2016, the Company had no unrecognized tax benefits and does not anticipate any significant change to the unrecognized tax benefit balance. The Company would classify interest and penalties related to uncertain tax positions as income tax expense, if applicable. There was no interest expense or penalties related to unrecognized tax benefits recorded through December 31, 2016. The NOLs from tax years 2006 through 2016 remain open to examination (and adjustment) by the Internal Revenue Service and state taxing authorities.

In 2016, as a result of the acquisition of National, the Company acquired $0.4 million of current income tax payable and $8.8 million in net deferred tax assets. Management determined that it was more likely than not that the Company will not realize the benefit of National's deferred tax assets. Therefore, the Company established a valuation allowance of $8.8 million against the acquired net deferred tax assets, with a corresponding adjustment to goodwill. National is not consolidated with the Company for federal income tax purposes; therefore, its federal NOLs (and other federal tax attributes) are not available to offset the federal taxable income or federal tax liability of the Company or other members of the Company's consolidated group. Upon the acquisition of National by the Company, National experienced an ownership change which resulted in a write-off of deferred income tax assets of approximately $3.2 million due to the applicable 382 Limitations.

Checkpoint is not consolidated with the Company for federal income tax purposes; therefore, its federal NOLs (and other federal tax attributes) are not available to offset the federal taxable income or federal tax liability of the Company or other members of the Company's consolidated group. In December 2015, Checkpoint experienced an ownership change as a result of an issuance of its common stock and its NOLs (and other tax attributes) are subject to applicable 382 Limitations (and similar state provisions).

20. Net Capital Requirements of Broker-Dealer Subsidiaries

National Securities is subject to the SEC's Uniform Net Capital Rule (Rule 15c3-1), which, among other things, requires the maintenance of minimum net capital. In February 2015, pursuant to a directive form FINRA, National Securities reverted back to using the alternative method of computing net capital from the aggregate indebtedness method. At September 30, 2016, National Securities had net capital of $6.2 million which was $6.0 million in excess of its required net capital of $250,000. National Securities is exempt from the provisions of Rule 15c-3-3 since it is an introducing broker-dealer that clears all transactions on a fully disclosed basis and promptly transmits all customer funds and securities to clearing brokers. Calculations of net capital and claimed exemptions are reviewed by an independent audit firm on an annual basis.

vFinance Investments is also subject to the SEC's Uniform Net Capital Rule (Rule 15c3-1), which, among other things, requires the maintenance of minimum net capital and requires that the ratio of aggregate indebtedness to net capital, both as defined, shall not exceed 15 to 1. At December 31, 2016, vFinance Investments had net capital of $2.2 million which was $1.2 million in excess of its required net capital of $1.0 million. vFinance Investments ratio of aggregate indebtedness to net capital was 0.8 to 1. vFinance Investments is exempt from the provisions of Rule 15c-3-3 since it is an introducing broker-dealer that clears all transactions on a fully disclosed basis and promptly transmits all customer funds and securities to clearing brokers. Calculations of net capital and claimed exemptions are reviewed by an independent audit firm on an annual basis.

Advances, dividend payments and other equity withdrawals from its Broker-Dealer Subsidiaries are restricted by the regulations of the SEC, and other regulatory agencies. These regulatory restrictions may limit the amounts that a subsidiary may dividend or advance to the Company.

21. Off Balance Sheet Risk and Concentrations of Credit Risk

National is engaged in trading and providing a broad range of securities brokerage and investment services to a diverse group of retail and institutional clientele, as well as corporate finance and investment banking services to corporations and businesses. Counterparties to National's business activities include broker-dealers and clearing organizations, banks and other financial institutions. National uses clearing brokers to process transactions and maintain customer accounts for National on a fee basis. National permits the clearing firms to extend credit to its clientele secured by cash and securities in the client's account. National's exposure to credit risk associated with the non-performance by its customers and counterparties in fulfilling their contractual obligations can be directly impacted by volatile or illiquid trading markets, which may impair the ability of customers and counterparties to satisfy their obligations to National. National has agreed to indemnify the clearing brokers for losses they incur while extending credit to National's clients. It is

National's policy to review, as necessary, the credit standing of its customers and counterparties. Amounts due from customers that are considered uncollectible by the clearing broker are charged back to National by the clearing broker when such amounts become determinable. Upon notification of a charge back, such amounts, in total or in part, are then either (i) collected from the customers, (ii) charged to the broker initiating the transaction and/or (iii) charged to operations, based on the particular facts and circumstances.

National maintains cash in bank deposits, which, at times, may exceed federally insured limits. National has not experienced and does not expect to experience losses on such accounts.

A short sale involves the sale of a security that is not owned in the expectation of purchasing the same security (or a security exchangeable) at a later date at a lower price. A short sale involves the risk of a theoretically unlimited increase in the market price of the security that would result in a theoretically unlimited loss.

22. Segment Information

The Company operates in three reportable segments, Dermatology Product Sales, Pharmaceutical and Biotechnology Product Development and National. The accounting policies of the Company's segments are the same as those described in Note 2. The following tables summarize, for the periods indicated, operating results by reportable segment (table in thousands):

Year Ended December 31, 2016	Dermatology Products Sales	Pharmaceutical and Biotechnology Product Development	National	Consolidated
Net Revenue	$ 3,587	$ 2,570	$ 10,323	$ 16,480
Direct cost of goods	(790)	-	-	(790)
Sales and marketing costs	(5,774)	-	-	(5,774)
Research and development	-	(35,134)	-	(35,134)
General and administrative	(1,474)	(26,755)	-	(28,229)
National expenses			(11,754)	(11,754)
Segment loss from operations	$ (4,451)	$ (59,319)	$ (1,431)	$ (65,201)
Segment assets	$ 4,469	$ 115,145	$ 38,220	$ 157,834

Year Ended December 31, 2015	Dermatology Products Sales	Pharmaceutical and Biotechnology Product Development	National	Consolidated
Net Revenue	$ 273	$ 590	$ -	$ 863
Direct cost of goods	-)	-	-	-)
Sales and marketing costs	(2,850)	-	-	(2,850)
Research and development	-	(29,810)	-	(29,810)
General and administrative	(1,682)	(17,052)	-	(18,734)
Segment loss from operations	$ (4,259)	$ (46,272)	$ -	$ (50,531)
Segment assets	$ 1,965	$ 116,542	$ -	$ 118,610

Corporate pre-tax loss consists of certain expenses that have not been allocated to reportable segments.

Significant Customers

For the year ended December 31, 2016, three of the Company's customers accounted for more than 10.0% of its total gross revenue in the amount of $1.9 million, $1.1 million, and $0.7 million, respectively.

At December 31, 2016, two of the Company's customers accounted for more than 10.0% of its total accounts receivable balance in the amount of $1.1 million and $0.5 million, respectively.

Net Revenue from Pharmaceutical and Biotechnology Product Development represents collaboration revenue from TGTX in connection with Checkpoint, which is classified as related party revenue.

23. Subsequent Events

Fortress

Opus Credit Facility Agreement

Since December 31, 2016 through March 16, 2017, the Company requested additional advances totaling $2.0 million from this facility.

Mustang

City of Hope Amended & Restated License Agreements

In March 2015, Mustang entered into an Exclusive License Agreement with COH (the "Original COH License") to acquire intellectual property rights pertaining to CAR-T technology. On February 17, 2017, Mustang and COH amended and restated the Original COH License in connection with the covered patents by entering into three separate amended and restated exclusive license agreements, one relating to CD123, one relating to IL-13 and one relating to the spacer technology, which amended the Original COH License in certain other respects and collectively replace the Original COH License in its entirety. The total potential consideration payable to COH by Mustang, in equity or cash, did not, in the aggregate, change from the Original COH License.

IV/ICV Agreement

On February 17, 2017, Mustang entered into an exclusive license agreement (the "IV/ICV Agreement") with COH to acquire intellectual property rights in patent applications related to the intraventricular and intracerebroventricular methods of delivering T cells that express CARs. Pursuant to the IV/ICV Agreement, Mustang will pay COH an upfront fee of $0.1 million within 30 days of the effective date of the IV/ICV Agreement, in addition to an annual maintenance fee. COH is eligible to receive milestone payments totaling approximately $0.1 million, upon and subject to the achievement of certain milestones. Royalty payments in the low single digits are due on net sales of licensed products and revenue from sublicenses.

Private Placement Financing

On January 31, 2017, Mustang completed the final closing of its private placement raising gross proceeds of $55.5 million in that closing, before expenses, for which OPN Capital Markets, the healthcare-related investment banking and research division of NSC (a related-party) was the placement agent and received a fee of $5.5 million or approximately 10% of the gross proceeds. In addition, the placement agent received 853,667 warrants or approximately 10% of the shares issued in the final closing. The financing involved the sale of units, each consisting of 10,000 shares of common stock and a warrant exercisable for 2,500 shares of common stock at an exercise price of $8.50 per share, for a total price of $65,000 per unit. The warrants have a five-year term and are only exercisable for cash. Mustang issued 8,536,774 unregistered shares of common stock and 2,134,193 warrants in connection with the final closing of Mustang's private placement. Subsequent to this closing Fortress' ownership in Mustang approximates 40%.

COH Issuance of Shares

In February 2017, Mustang issued 293,588 shares of Mustang common stock valued at $5.73 per share or $1.7 million to COH. This grant was made pursuant to the Amended License Agreement, which provides for the issuance of the additional shares in Mustang's common stock rather than Class A common shares. The issuance of the shares was effective October 2016.

Advisory Agreement with Caribe BioAdvisors, LLC, a Related Party

On December 30, 2016, Mustang's board of directors unanimously approved and authorized the execution of an advisory agreement dated January 1, 2017 (the "Advisory Agreement") with Caribe BioAdvisors, LLC (the "Advisor"), owned by Michael S. Weiss, the Chairman of the Board of Mustang, to provide the board advisory services of Mr. Weiss as Chairman of the Board. Pursuant to the Advisory Agreement, the Advisor will be paid an annual cash fee of $60,000, in addition to any and all annual equity incentive grants paid to members of the Board of Mustang.

Cyprium

Effective March 10, 2017, the Company and Cyprium entered into a Founders Agreement and a Management Services Agreement.

On March 13, 2017, Cyprium entered into a Cooperative Research and Development Agreement (CRADA) with the Eunice Kennedy Shriver National Institute of Child Health and Human Development ("NICHD"), part of the NIH, to advance the clinical development of Phase 3 candidate CUTX-101, a Copper Histidinate injection, for the treatment of Menkes disease. Also effective March 13, 2017, Cyprium and the NICHD entered into a worldwide, exclusive license agreement to develop and commercialize adeno-associated virus (AAV)-based gene therapy, called AAV-ATP7A, to deliver working copies of the copper transporter that is defective in Menkes patients and to be used in combination with CUTX-101.

Caelum

Effective January 1, 2017, the Company and Caelum entered into a Founders Agreement and a Management Services Agreement.

On January 1, 2017, Caelum also entered into an Exclusive License Agreement with Columbia University to secure worldwide license rights to CAEL-101 (11-1F4), a chimeric fibril-reactive monoclonal antibody (mAb) being evaluated in a Phase 1a/1b study for the treatment of amyloid light chain amyloidosis.

Checkpoint

On December 30, 2016, Checkpoint's board of directors unanimously approved and authorized the execution of an advisory agreement dated January 1, 2017 (the "Advisory Agreement") with Caribe BioAdvisors, LLC (the "Advisor"), owned by Michael S. Weiss, the Chairman of the Board of Checkpoint, to provide the board advisory services of Mr. Weiss as Chairman of the Board. Pursuant to the Advisory Agreement, the Advisor will be paid an annual cash fee of $60,000, in addition to any and all annual equity incentive grants paid

to members of the Board of Checkpoint.

24. Selected Quarterly Financial Data (Unaudited)

The following table contains quarterly financial information for fiscal years 2016 and 2015. The Company believes that the following information reflects all normal recurring adjustments necessary for a fair statement of the information for the periods presented.

(in thousands, except per share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2016				
Total Revenue	$ 660	$ 2,230	$ 975	$ 14,405
Operating expenses	$ (15,571)	$ (17,042)	$ (17,180)	$ (32,217)
Other income/(expense)	$ (1,552)	$ (1,253)	$ (710)	$ (2,065)
Non-controlling interests	$ 4,438	$ 3,911	$ 3,975	$ 3,871
Net loss attributable to common stockholders	$ (12,205)	$ (12,478)	$ (12,981)	$ (17,431)
Basic and diluted net loss per common share	$ (0.31)	$ (0.31)	$ (0.32)	$ (0.43)
2015				
Total Revenue	$ 500	$ -	$ 25	$ 338
Operating expenses	$ (12,571)	$ (7,762)	$ (18,097)	$ (12,964)
Other income/(expense)	$ (464)	$ 1,344	$ (1,783)	$ (2,449)
Non-controlling interests	$ 479	$ 243	$ 1,694	$ 3,039
Net loss attributable to common stockholders	$ (12,056)	$ (6,175)	$ (18,161)	$ (12,036)
Basic and diluted net loss per common share	$ (0.31)	$ (0.16)	$ (0.46)	$ (0.30)

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Fortress Biotech, Inc.

By: /s/ Lindsay A. Rosenwald, M.D.
Name: Lindsay A. Rosenwald, M.D.
Title: Chairman, President and Chief Executive Officer
(Principal Executive Officer)

March 16, 2017

POWER OF ATTORNEY

We, the undersigned directors and/or executive officers of Fortress Biotech, Inc., hereby severally constitute and appoint Lindsay A. Rosenwald, M.D., acting singly, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent full power and authority to do and perform each and every act and thing necessary or appropriate to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that said attorney-in-fact and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

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/ Lindsay A. Rosenwald, M.D. Lindsay A. Rosenwald, M.D.	Chairman of the Board of Directors, President and Chief Executive Officer (*Principal Executive Officer*)	March 16, 2017
/s/ Lucy Lu, M.D. Lucy Lu, M.D.	Executive Vice President and Chief Financial Officer (*Principal Financial Officer*)	March 16, 2017
/s/ Eric K. Rowinsky, M.D. Eric K. Rowinsky, M.D.	Vice Chairman of the Board of Directors	March 16, 2017
/s/ Michael S. Weiss Michael S. Weiss	Executive Vice Chairman, Strategic Development and Director	March 16, 2017
/s/ Jimmie Harvey, Jr., M.D. Jimmie Harvey, Jr., M.D.	Director	March 16, 2017
/s/ Malcolm Hoenlein Malcolm Hoenlein	Director	March 16, 2017
/s/ Dov Klein Dov Klein	Director	March 16, 2017
/s/ J. Jay Lobell J. Jay Lobell	Director	March 16, 2017

EXHIBIT 21.1

SUBSIDIARIES OF FORTRESS BIOTECH, INC.

Subsidiaries of Fortress Biotech, Inc. at December 31, 2016, with jurisdiction of incorporation or formation:

- Avenue Therapeutics, Inc. (Delaware)
- CB Securities Corporation (Massachusetts)
- Checkpoint Therapeutics, Inc. (Delaware)
- Coronado SO Co. (Delaware)
- Escala Therapeutics, Inc., formerly Altamira Biosciences, Inc. (Delaware)
- Helocyte, Inc., formerly DiaVax Biosciences, Inc. (Delaware)
- Innmune Limited (United Kingdom)
- Journey Medical Corporation (Delaware)
- Mustang Bio, Inc. (Delaware)
- National Holdings Corporation (Delaware).

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Fortress Biotech, Inc.

New York, New York

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-213199) and Form S-8 (Nos. 333-184616, 333-194588 and 333-206645) of Fortress Biotech, Inc. of our reports dated March 16, 2017 relating to the consolidated financial statements and the effectiveness of Fortress Biotech, Inc.'s internal control over financial reporting appearing in this Annual Report on Form 10-K.

/s/ BDO USA, LLP
Boston, Massachusetts

March 16, 2017

Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements of Fortress Biotech, Inc. (formerly Coronado Biosciences, Inc.) on Form S-3 (No. 333-213199) and Form S-8 (No. 333-184616, 333-194588 and 333-206645) of our report dated March 15, 2016, on our audit of the consolidated balance sheet as of December 31, 2015 and the related consolidated financial statements of operations, stockholders' equity and cash flows for each of the years in the two-year period ended December 31, 2015, which report is included in this Annual Report on Form 10-K to be filed on or about March 16, 2017.

/s/ EisnerAmper LLP
New York, New York
March 16, 2017

EXHIBIT 31.1

CERTIFICATION PURSUANT TO

SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Lindsay A. Rosenwald, M.D. certify that:

(1) I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2016 of Fortress Biotech, Inc. (the "Registrant");

(2) 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(s) 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 the 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(s) 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 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.

Dated: March 16, 2017

By: /s/ Lindsay A. Rosenwald, M.D.
Lindsay A. Rosenwald, M.D.
Chairman, President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION PURSUANT TO

SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Lucy Lu, M.D., certify that:

(1) I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2016 of Fortress Biotech, Inc. (the "Registrant");

(2) 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(s) 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 t'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 the 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(s) 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.

Dated: March 16, 2017

By: /s/ Lucy Lu, M.D.
Lucy Lu, M.D.
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Fortress Biotech, Inc. (the "Company") for the period ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lindsay A. Rosenwald, M.D., Chairman, President and Chief Executive Officer of the Company, hereby 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 as of, and for, the periods presented in the Report.

Dated: March 16, 2017

By: /s/ Lindsay A. Rosenwald, M.D.
Lindsay A. Rosenwald, M.D.
Chairman, President and Chief Executive Officer (Principal Executive Officer)

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Fortress Biotech, Inc. (the "Company") for the period ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lucy Lu, M.D., Executive Vice President and Chief Financial Officer of the Company, hereby 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, as of, and for, the periods presented in the Report.

Dated: March 16, 2017

By: /s/ Lucy Lu, M.D.
Lucy Lu, M.D.
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)