

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Flexion Therapeutics Inc  
Form 10-K  
March 10, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(MARK ONE)

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 number 001-36287

Flexion Therapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware	26-1388364
(State or other jurisdiction of	(I.R.S. Employer
incorporation or organization)	Identification No.)
10 Mall Road, Suite 301	
Burlington, Massachusetts	01803
(Address of principal executive offices)	(Zip Code)

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

(781) 305-7777

(Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	The NASDAQ Stock Market LLC

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 during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☐ No ☒.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the 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. ☐

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 by Rule 12b-2 of the Act). Yes ☐ No ☒.

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant based on the last reported sales price of the common stock on June 30, 2016 was approximately \$341,322,482.

The number of outstanding shares of the registrant's common stock as of March 2, 2017 was 31,731,824.

DOCUMENTS INCORPORATED BY REFERENCE

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Portions of the registrant's proxy statement to be filed with the Securities and Exchange Commission pursuant to Regulation 14A in connection with the registrant's 2017 Annual Meeting of Stockholders, which will be filed subsequent to the date hereof, are incorporated by reference into Part III of this Form 10-K. Such proxy statement will be filed with the Securities and Exchange Commission not later than 120 days following the end of the registrant's fiscal year ended December 31, 2016.

---

FLEXION THERAPEUTICS, INC.

FORM 10-K—ANNUAL REPORT

For the Fiscal Year Ended December 31, 2016

TABLE OF CONTENTS

PART I

Item 1.	<u>Business</u>	2
Item 1A.	<u>Risk Factors</u>	27
Item 1B.	<u>Unresolved Staff Comments</u>	55
Item 2.	<u>Properties</u>	55
Item 3.	<u>Legal Proceedings</u>	55
Item 4.	<u>Mine Safety Disclosures</u>	55

PART II

Item 5.	<u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	56
Item 6.	<u>Selected Financial Data</u>	58
Item 7.	<u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	59
Item 7A.	<u>Quantitative and Qualitative Disclosures About Market Risk</u>	72
Item 8.	<u>Financial Statements and Supplementary Data</u>	73
Item 9.	<u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosure</u>	99
Item 9A.	<u>Controls and Procedures</u>	99
Item 9B.	<u>Other Information</u>	99

PART III

Item 10.	<u>Directors, Executive Officers and Corporate Governance</u>	101
Item 11.	<u>Executive Compensation</u>	101
Item 12.	<u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	101

Item 13.	<u>Certain Relationships and Related Transactions, and Director Independence</u>	101
Item 14.	<u>Principal Accounting Fees and Services</u>	101
PART IV		
Item 15.	<u>Exhibits, Financial Statement Schedules</u>	102
	<u>Signatures</u>	103

---

## PART I

### Special Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K, or this Annual Report, contains “forward-looking statements”—that is, statements related to future, not past, events—as defined in Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that reflect our current expectations regarding our future development activities, results of operations, financial condition, cash flows, performance and business prospects, and opportunities, as well as assumptions made by, and information currently available to, our management. Forward-looking statements include any statement that does not directly relate to a current or historical fact. The Company has tried to identify forward-looking statements by using words such as “believe,” “may,” “could,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “seek,” “plan,” “expect,” “would.” Among the factors that could cause actual results to differ materially from those indicated in the forward-looking statements are risks and uncertainties inherent in our business including, without limitation: we have incurred significant losses since our inception and we expect to incur substantial losses for the foreseeable future and may never achieve or maintain profitability; we have not generated any revenue from, or received regulatory approval for, any of our product candidates; we are a development stage company and will require additional capital prior to commercializing Zilretta™ (also known as FX006) or any of our other potential future product candidates; we may be unable to successfully complete the development of, obtain regulatory approval for, or commercialize Zilretta or any of our other product candidates; we rely on third parties to manufacture and conduct the clinical trials of our product candidates, which could delay or limit their future development or regulatory approval; we currently do not have the infrastructure to commercialize any of our product candidates if such products receive regulatory approval; we may be unable to adequately maintain and protect our proprietary intellectual property assets, which could impair our commercial opportunities; and other risks detailed below in “Item 1A. Risk Factors.”

Although we believe that the expectations reflected in our forward-looking statements are reasonable, we cannot guarantee future results, events, levels of activity, performance or achievement. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.

## Item 1. Business

Unless the content requires otherwise, references to “Flexion,” “Company,” “we,” “our,” and “us,” in this Annual Report refer to Flexion Therapeutics, Inc. and our subsidiary, Flexion Securities Corporation, Inc.

### Overview

We are a specialty pharmaceutical company focused on the development and commercialization of novel, local therapies for the treatment of patients with musculoskeletal conditions, beginning with osteoarthritis, or OA, a type of degenerative arthritis. In May 2016, the U.S Food and Drug Administration informed us that the safety and efficacy data from the registration program for Zilretta™ (FX006), our lead investigational product candidate, were acceptable to support the submission of a new drug application, or NDA. In December 2016, we submitted the NDA for Zilretta, and in February 2017, we announced that the FDA accepted the Zilretta NDA for filing and has established a user fee goal date under the Prescription Drug User Fee Act (PDUFA) of October 6, 2017. Zilretta, is an injectable, extended-release, intra-articular, or IA, meaning “in the joint,” steroid that we are developing as a treatment for patients with moderate to severe OA pain. We specifically designed Zilretta to combine a commonly administered steroid, triamcinolone acetonide, or TA, with poly lactic-co-glycolic acid, referred to as PLGA, with the goal of providing sustained therapeutic concentrations in the joint and persistent analgesic effect. Zilretta is intended to address the limitations of current IA therapies by providing extended, local analgesia while avoiding systemic side effects, which are effects that can occur throughout the body as a result of drug that is released from the site of injection into circulating blood. To date, we have completed seven clinical trials in which nearly 700 patients with OA of the knee have been treated with Zilretta. The overall frequency of treatment-related adverse events in these trials has been similar to those observed with placebo and no drug-related serious adverse events have been reported. Both the magnitude and duration of pain relief provided by Zilretta in clinical trials have been shown to be clinically meaningful with the magnitude of pain relief amongst the largest seen to date in OA clinical trials.

Based on the strength of our pivotal and other clinical trials, we believe that Zilretta has the potential to address a significant unmet medical need for OA pain management by providing safe, effective and extended pain relief. We believe the following attributes uniquely distinguish Zilretta:

- An injectable, IA, extended-release investigational treatment for patients with moderate to severe OA pain that has demonstrated in clinical trials to date the following:
  - significant improvements in validated OA specific measures compared to the current injectable standard of care,
  - significant pain relief against placebo as measured by the weekly mean of the Average Daily Pain, or ADP, score at weeks 1 through 16 and, on average, an approximately 50 percent reduction in pain from baseline over week 12,
  - persistent therapeutic concentrations of drug in the joint and durable efficacy,
  - statistically significant ( $p < 0.05$ , 2-sided) reduction in the rise of blood glucose compared to that observed following immediate-release TA injection in Type 2 diabetic patients who also have knee OA,
  - highly significant ( $p < 0.0001$ , 2-sided) and clinically meaningful pain relief against placebo as measured by the weekly mean of the ADP score,
  - reduced rescue medicine consumption compared with placebo and immediate-release TA, and,
  - an acceptable safety profile with limited systemic exposures and the potential for fewer serious side effects compared to oral treatment options for OA pain.
- Amongst the largest analgesic effects seen in OA clinical trials.
- Strong proprietary position through a combination of patents, trade secrets and proprietary know-how, as well as eligibility for marketing exclusivity.

- Well-defined Section 505(b)(2) of the Federal Food Drug and Cosmetic Act, or FDCA, regulatory pathway seeking approval for a novel formulation of an already approved immediate-release steroid used by orthopedists and rheumatologists.

- Familiarity of orthopedists and rheumatologists with IA injections utilizing the same steroid at the same dose.

- Potential for pharmacoeconomic benefits due to improved efficacy and durability that could delay costly and invasive total joint replacement, also referred to as total joint arthroplasty, or TJA.

We have worldwide commercialization rights for Zilretta. We also have an exclusive worldwide license agreement with Southwest Research Institute, or SwRI®, with respect to the use of SwRI's proprietary microsphere manufacturing technologies for certain steroids formulated with PLGA, including Zilretta. If Zilretta is approved, we intend to market our products in the United States through our own sales force targeting specialty physicians, including orthopedists and rheumatologists. While we believe that the United States represents the most attractive market for Zilretta, we will continue to evaluate opportunities to develop and commercialize Zilretta in territories outside the United States.

Zilretta and our PLGA formulation technology is protected through a combination of patents, trade secrets, and proprietary know-how, and we intend to seek marketing exclusivity for any approved products.

OA is a type of degenerative arthritis that is caused by the progressive breakdown and eventual loss of cartilage in one or more joints. Arthritis is the most common cause of disability in the United States and OA is the most common joint disease, affecting 27 million Americans, with numbers expected to grow as a result of aging, obesity and sports injuries. Recent data suggest that OA accounts for over \$185 billion of annual healthcare expenditures in the United States, which does not include loss of productivity costs. We estimate that by 2030, 45 million people will have OA. OA commonly affects large weight-bearing joints like the knees and hips, but also occurs in the shoulders, hands, feet and spine. Patients with OA suffer from joint pain, tenderness, stiffness and limited movement. As the disease progresses, it becomes increasingly painful and debilitating, culminating, in many cases, in the need for TJA.

Because there is no cure for the disease, controlling pain and delaying surgery are the primary goals for treatment regimens. Oral drugs, such as non-steroidal anti-inflammatory drugs, or NSAIDs, including COX II inhibitors, and serotonin and norepinephrine reuptake inhibitors, or SNRIs, as well as topical NSAIDs, are used to treat early-stage OA pain but have limited effect on pain and, given the amount and frequency of use in OA patients, are associated with serious side effects. For example, NSAIDs have shown increased risk of serious cardiovascular (CV) thrombotic events, myocardial infarction, and stroke. Furthermore, this class of drugs can cause serious gastrointestinal (GI) adverse events including bleeding, ulceration, and perforation of the stomach or intestines. These serious side effects are particularly worrisome because OA patients often have co-existing medical conditions, including diabetes and hypertension. For patients with moderate to severe OA pain, IA medicines, such as immediate-release steroids and hyaluronic acid, or HA, injected into the joint, are generally considered well-tolerated, but leave the joint rapidly and fail to produce or maintain clinically meaningful pain relief. For patients who progress to end-stage OA, physicians prescribe opioids, which in addition to the risk of addiction and abuse, have numerous serious side effects including respiratory depression, hypotension, constipation, cardiac events and, increasingly, deaths from unintentional overdose. As a result of these limitations, many OA patients experience persistent and worsening pain, which often culminates in the decision for TJA, a painful and expensive procedure. Further, because the initial joint replacement wears out over time, the younger the patient is at the time of the joint replacement, the more likely it is that he or she will require repeat surgery in their lifetime.

Our projections indicate that by 2030 approximately 23.5 million of the 45 million OA patients will have knee OA. According to IMS Health, each year over 5.5 million large joint OA patients in the United States receive IA steroid injection treatments in the knee, hip, and shoulder, within over 4.2 million of these being knee injections. In 2015, the number of patients that received knee injections of IA steroids increased approximately 12% over 2014. We estimate that an additional 1 million patients received knee injections of IA HA, which the FDA approved for use only in the knee. Despite recent negative guidance related to HA as a treatment for knee OA from specialty societies (e.g. the



American Academy of Orthopedic Surgeons (AAOS) and the Osteoarthritis Research Society International (OARSI)) and given that select payer groups have limited reimbursement for the entire class of HA

products, which collectively may begin to put downward pressure on HA sales, HA sales in the United States were approximately \$948 million in 2015, with a cost per treatment ranging from \$500 to \$1000. We believe the vast majority of these sales were related to knee therapy. Our clinical trials to date evaluated Zilretta in patients with knee OA, which represents the most common joint treated with IA therapies.

Given the limitations of current therapies, we believe Zilretta, if approved, would provide an attractive therapeutic alternative. Clinical trials to date for Zilretta have demonstrated significant improvements in validated OA specific measures compared to the current injectable standard of care, persistent therapeutic concentrations of drug in the joint and durable efficacy, and an attractive safety profile with limited systemic exposures.

### Our Strategy

Our goal is to cost-effectively develop and commercialize novel, locally delivered medicines that safely and effectively address significant unmet medical needs. The principal elements of our strategy to accomplish this goal are the following:

• **Focus initially on novel product candidates that provide long-lasting analgesia locally while avoiding systemic side effects.** We intend to develop anti-inflammatory and analgesic therapies for the treatment of patients with musculoskeletal conditions, beginning with OA. Many OA patients will eventually require IA injection therapies to control their pain as the disease progresses. Currently available IA steroids, none of which are formulated for extended-release, leave the joint rapidly and typically fail to confer pain relief of sufficient magnitude or duration. Since, by medical practice, steroids are not injected more frequently than every three months, patients can experience months of pain during that time. While the benefits of HA injections generally last for a longer period of time than steroid injections, they are only marginally more effective than placebo. As a result, we believe there is a significant unmet medical need for persistent, effective and safe OA pain relief that can be addressed by extended-release injection therapies. We have therefore formulated our IA product candidate, Zilretta, with the goal of achieving effective drug concentrations in the joint for months, while avoiding significant plasma concentrations of drug that may have systemic side effects.

• **Mitigate development risk and expedite regulatory timeline to product approval.** We seek to mitigate development risk by selecting product candidates that have at least demonstrated efficacy in animal models of disease or have validated mechanisms of action. Our extended-release technology employs PLGA delivery systems, which are already used in approved extended-release drug products outside of OA and in approved surgical devices. Because Zilretta incorporates an already approved steroid in PLGA, it qualifies for the Section 505(b)(2) NDA pathway under the FDCA, which can be an expeditious, cost-effective means to seek product approval, as well as to potentially expand indications for this product candidate. Section 505(b)(2) of the FDCA enables the applicant to rely, in part, on published literature or the FDA's findings of safety and efficacy for an existing product in support of its application.

• **Retain commercial rights in the United States and selectively partner outside of the United States.** Because IA therapies in the United States are administered by a relatively small number of specialists, particularly orthopedists and rheumatologists, we believe that, if approved, we can cost-effectively commercialize Zilretta with our own specialty sales and marketing organization in the United States, and thereby retain more of the commercial value of this product candidate. In prior years, Genzyme Corporation, which was subsequently acquired by Sanofi, supported sales of Synvisc by utilizing a sales force of approximately 110 representatives. We believe we can establish an effective U.S. commercial organization with our own specialty sales force of approximately 100 representatives that target orthopedists and rheumatologists. While we believe that the United States represents the most attractive market for Zilretta, we will continue to evaluate opportunities to develop and commercialize Zilretta in territories outside the United States where we believe there is adequate pricing and reimbursement available.

## Osteoarthritis

### Overview

OA, also referred to as degenerative joint disease, is the most common joint disease in the United States, affecting 27 million Americans, with numbers expected to grow as a result of aging, obesity and sports injuries.

•With the U.S. population between the ages of 45 and 64 having grown 31.5% from 2000 through 2010 and accounting for 26.4% of the total population, we expect changing demographics will likely contribute to a growing number of OA patients.

•Approximately 35% of U.S. adults are obese, which increases the risk of developing OA.

•Knee injury is common, particularly amongst young athletes, and increases the risk of developing OA by more than fivefold.

•OA accounts for over \$185 billion of annual healthcare expenditures, which does not include loss of productivity costs.

•As reported in an Osteoarthritis Research Society International (OARSI) white paper (Nov 2016), “subjects in the US patients with symptomatic radiographic knee OA were 23% more likely to die prematurely than people free from OA independent of age, sex, and race”.

As an example, one in two Americans is expected to develop symptomatic knee OA, the most common form of OA, during their lifetime, according to the U.S. Centers for Disease Control and Prevention. Recent research estimates that the average age of physician-diagnosed knee OA has fallen by 16 years, from age 72 in the 1990s to age 56 in the 2010s. According to the same research, Americans between the ages of 35 and 84 in the early 2010s will account for approximately 6.5 million new cases of knee OA over the next decade.

There is no cure for OA. As a result, current treatments are intended to address symptoms of OA, in particular, relief of pain and improvement in functional status. The therapeutic regimen for OA becomes increasingly invasive with progression of the disease, culminating, in many cases, in TJA. In addition, because patients are being diagnosed with OA earlier in their lives, many patients will require repeat TJAs. Because the decision to have TJA is based in large part on intractable pain and functional impairment, we believe that a new therapy which meaningfully and durably relieves pain and improves function could delay TJA.

### Current Treatments for OA

**Early-Stage OA Treatments.** In early disease, treatment begins with non-pharmacologic therapy including exercise, weight control and physical therapy. As the disease progresses, physicians prescribe pharmacologic therapy, beginning with acetaminophen and progressing to oral NSAIDs, including COX II inhibitors, topical NSAIDs or SNRIs. Available oral therapies have serious side effects. For example, Cymbalta, a SNRI, may have a role in worsening depression and the emergence of suicidality in certain patients. In addition to their serious side effects, oral drugs provide limited pain relief and eventually become insufficient to control OA pain for many patients as the disease progresses.

**IA Injection Treatments.** When non-pharmacologic therapy and oral pain medications prove inadequate, physicians typically transition patients to IA injections. Steroids are first line IA therapy and when this does not provide sufficiently durable pain relief, patients may progress to IA HA, a significantly more expensive, but currently reimbursable, therapy with only marginally greater effect than placebo. Triamcinolone acetonide, or TA, the corticosteroid used in Zilretta, is amongst the most commonly prescribed IA corticosteroid injections.

End-Stage Treatments. When patients progress to the point where IA injection therapies fail to adequately control OA pain, physicians may prescribe opioids as a medicine of last resort.

TJA. Due to severe pain that can no longer be controlled therapeutically, many patients opt to have TJA, which is costly and painful. One of the most prevalent TJA procedures in the United States is total knee arthroplasty.

Compared to existing drug therapy, total knee arthroplasty is very expensive, with average costs ranging between \$25,000 and \$50,000, and as many as 30% of patients are dissatisfied with the outcome of this procedure. The

earlier a patient receives TJA, the more likely the patient may need repeat replacement surgery in following years. In 2010, inpatient costs exceeded \$13 billion per year in the United States for total knee arthroplasty alone and based on some estimates the number of total knee arthroplasties is expected to increase six-fold to 3.5 million procedures per year between 2011 and 2030. Our own market research has indicated that healthcare payors would be willing to reimburse additional OA therapies that have the potential to delay the need for TJA.

#### Limitations of Current Treatments for OA

Current oral therapies, such as NSAIDs, may offer adequate analgesia for early-stage OA pain, but they may be associated with serious side effects such as gastrointestinal bleeding and cardiovascular events, and, importantly, are eventually ineffective at managing OA pain as the disease progresses.

IA therapies, including steroids and HA preparations, are generally well-tolerated but provide pain relief that is insufficient or inadequate in duration. All IA steroid therapies approved for OA are immediate-release suspensions or solutions that leave the joint within hours to days and are rapidly absorbed systemically, which may result in undesirable side effects. For example, IA immediate-release steroid injections are associated with a rapid elevation of blood glucose in diabetics, which can be of clinical concern. While IA steroids demonstrate large initial analgesic effects relative to other therapies, as a result of leaving the joint quickly, IA steroids typically fail to confer pain relief of sufficient magnitude or duration. In addition, current standards of care dictate that IA steroid suspensions not be administered more frequently than once every three months. Based on internal analysis, we believe approximately 44% of patients receiving IA immediate-release steroids are unsatisfied with the duration of benefit.

Despite U.S. sales of approximately \$948 million in 2015, IA HA therapies, which are approved only for treatment in the knee, produce only marginally more effective pain relief than placebo and may have no discernible effect on a patient's ability to carry out their daily activities. In treatment guidelines for knee OA published in May 2013, the AAOS concluded that current published studies do not show any clinically effective response for HA injections. As a result, the guidelines do not recommend HA treatment for symptomatic knee OA due to lack of efficacy and, most recently, certain insurance carriers are no longer providing policy coverage of HA and this may begin to put downward pressure on HA sales.

For patients with advanced disease, opioids are the medicine of last resort. Opioids, however, are associated with significant side effects, particularly when administered chronically. These side effects include serious dependency and abuse potential, respiratory depression, hypotension, constipation, cardiac events and, increasingly, deaths from unintentional overdose.

In sum, current therapies, for OA pain are inadequate and do not address the desire among physicians and healthcare payors to manage pain for longer periods of time, which can delay TJA.

#### The Flexion Extended Release Technology

Our extended-release technology allows us to incorporate pharmaceuticals in PLGA microspheres. PLGA is a proven extended-release delivery vehicle that is metabolized to carbon dioxide and water as it releases drug in the IA space and is used in approved drug products and surgical devices. The technology is designed to enable novel formulations of pharmaceuticals by providing extended-release of drugs over time and the physical properties of the polymer-drug matrix can be varied to achieve specified drug loads and release rates. Key to the success of our IA therapies is the ability to maintain persistent therapeutic concentrations of drug in the joint, while minimizing systemic exposure. We believe we are the first company to administer PLGA microspheres into a human joint, and preclinical and clinical data suggest that Zilretta may provide local therapeutic concentrations that could last for at least three months and result in very low systemic concentrations of drug. The pharmacokinetic, or PK, clinical trials of Zilretta provide

direct evidence that following a single injection, therapeutic concentrations of TA are maintained locally (in the joint) for at least 12 weeks, while very low concentrations of TA enter systemic circulation. Furthermore, clinical data from our pivotal efficacy trials of Zilretta suggest that following a single injection, Zilretta can provide durable local pain relief and functional improvement, while producing very low systemic concentrations and attractive systemic safety profiles. Together these data suggest that the persistent local delivery

of Zilretta's active pharmaceutical ingredient from PLGA microspheres has the potential to provide prolonged, local therapeutic effects while reducing the potential for systemic side effects.

Zilretta is our lead, late-stage, intra-articular, extended-release investigational steroid treatment that combines TA with PLGA. Zilretta was specifically designed to provide sustained therapeutic concentrations in the joint and persistent analgesic effect, and is intended to address the limitations of current IA therapies by providing local and long lasting analgesia over a period of months while minimizing systemic exposure and avoiding serious side effects. In our completed Phase 3 clinical trial, Zilretta demonstrated significant and clinically meaningful pain relief compared to placebo through week 16. Zilretta also showed significant and clinically meaningful improvements in validated OA specific secondary outcome measures at each measured time point through 12 weeks in that trial compared to the current injectable standard of care, immediate-release TA. While Zilretta showed numeric improvement versus immediate-release TA at weeks 2 through 12 on the average daily pain rating scale, it did not achieve statistical significance in that measure throughout the duration of the trial.

The frequency of treatment-related side effects was comparable across all treatment arms in the trial.

As previously reported, Flexion discontinued the internal development of FX007 for post-operative pain and FX005 for the treatment of end-stage OA patients.

We believe Zilretta and our technology will be protected primarily through a combination of patents, trade secrets and proprietary know-how, and we intend to seek marketing exclusivity for any approved products. A composition of matter patent has been issued by the United States Patent and Trademark Office, or U.S. PTO, for Zilretta, with a patent term into 2031. Method of manufacturing and method of use claims have been granted by the U.S PTO, with a patent term in 2031. Considerable expertise and effort was required to carry out the large body of original work underlying the formulation of Zilretta, including experimenting with, and observing the effects of over 50 steroid and PLGA formulations. We believe our extensive know-how and trade secrets relating to the manufacturing process for Zilretta, including those that relate to precise pharmaceutical release profiles, represent a competitive advantage.

Zilretta—Late-Stage Candidate for IA Therapy for Patients with Moderate to Severe OA Pain

#### Development Program

To date, we have completed seven clinical trials in which we have evaluated Zilretta against either immediate-release TA injection or placebo (saline) or both. A total of approximately 1,200 patients were treated in these seven clinical trials, of which nearly 700 patients received Zilretta, 260 patients received immediate-release TA and 262 patients received placebo.

In November 2016, we announced top-line results from a clinical trial to assess the effects of Zilretta on the blood glucose levels of adults with OA of the knee who also have Type 2 (adult) diabetes. The objective of the double-blind, randomized, parallel group, single-dose study was to examine if Zilretta had effects on blood glucose levels that differ from immediate-release TA. Investigators from seven study sites enrolled 33 patients, randomized 1:1 to receive a single intra-articular injection of 40 mg Zilretta or 40 mg immediate-release TA. Blood glucose levels were evaluated for a total of 3 weeks (one week prior to injection and two weeks post injection) using a continuous glucose

monitoring device. Patients returned for follow-up visits at Day 8, Day 15 and Week 6/Day 43. The primary endpoint compared the change in average glucose values from the period of 72 hours before to the period of 72 hours after injection with Zilretta versus immediate-release TA. The data demonstrate that Zilretta is associated with a statistically significant ( $p < 0.05$ , 2-sided) and clinically relevant reduction in the rise of blood glucose compared to that observed following TA injection in patients who also have knee OA.

In February 2016, we announced top-line results from our second pivotal Zilretta study, a Phase 3 clinical trial that enrolled 486 patients with moderate to severe OA knee pain. This Phase 3 trial met its primary endpoint at week 12, demonstrating highly statistically significant ( $p < 0.0001$ ), durable and clinically meaningful pain relief against placebo (saline) see Figure D below. In clinical trials, the “p-value” is the probability that the result was obtained by chance. For example, a “p-value” of 0.10 would indicate that there is a 10% likelihood that the observed results could have happened at random. By convention, a “p-value” that is less than 0.05 is considered statistically



significant. In addition, Zilretta achieved statistically significant analgesia against placebo in this trial at each of weeks 1 through 16 and patients treated with Zilretta experienced, on average, a 50 percent reduction from baseline pain over weeks 1 through 12. In pre-specified analyses, Zilretta achieved statistical significance against placebo in validated OA specific and quality of life secondary measures at each measured time point through week 12.

In pre-specified secondary measures, compared to commercially available immediate-release TA, Zilretta also demonstrated statistical significance at each measured time point through 12 weeks on the Western Ontario and McMaster Universities Osteoarthritis Index, commonly referred to as WOMAC®, subscales for WOMAC A (pain), WOMAC B (stiffness) and WOMAC C (function), see Figures A, B and C below, and the validated Knee injury and Osteoarthritis Outcome Score, commonly referred to as KOOS, quality of life, or QOL, subscale and showed numeric improvements at weeks 2 through 12 on the daily pain rating scale, although it did not achieve statistical significance in that measure throughout the duration of the trial. WOMAC is a validated, widely used questionnaire used by healthcare professionals to specifically evaluate the condition of patients with OA of the knee and hip, including pain, stiffness, and physical function of the joints and the KOOS QOL subscale is a validated questionnaire used by healthcare professionals to evaluate the extent to which knee symptoms compromise a patient's quality of life. The frequency of treatment-related side effects in this study was comparable across all treatment arms. No drug-related serious adverse events were observed and no patients treated with Zilretta were discontinued from the study due to a treatment-related side effect. We intend to present detailed results from the trial at a future scientific conference and have submitted the results for publication in a journal.



In September 2015, we reported top-line results from our first pivotal Zilretta study, a Phase 2b clinical trial that enrolled 310 patients with moderate to severe OA knee pain. In this trial, 40 mg of Zilretta, compared to placebo (saline), demonstrated statistical significance in average pain relief over weeks 1 through 12 ( $p = 0.0012$ ; 2-sided) and over weeks 1 through 24 ( $p = 0.0209$ ; 2-sided). At weekly time points, 40 mg of Zilretta also demonstrated superiority to placebo in pain relief beginning at week 1, continuing to week 11 and also at week 13 ( $p < 0.05$  at each time point; 2-sided). The primary endpoint of the trial, pain relief against placebo at week 12, did not reach statistical significance ( $p = 0.0821$ ; 2-sided). However, a pre-specified, commonly applied sensitivity analysis, Baseline Observation Carried Forward/Last Observation Carried Forward (BOCF/LOCF), that addresses missing data due to patient dropouts demonstrated statistical significance for the primary endpoint at week 12 ( $p = 0.042$ ), while also demonstrating significance at all time points between weeks 1 and 11 and at week 13 ( $p < 0.05$  at each time point; 2-sided). Overall, the 40 mg dose of Zilretta performed better than the 20 mg Zilretta dose. In particular, the 40 mg dose conferred more durable pain relief. The frequency of treatment-related adverse events across the three groups (Zilretta 40 mg, Zilretta 20 mg and placebo) was comparable, and no drug-related serious adverse events were observed in the trial.

In June 2013, we announced top-line results from our Phase 2b dose-ranging clinical trial of Zilretta, which enrolled 229 patients with moderate to severe knee OA pain. In this trial, Zilretta demonstrated clinically meaningful and statistically significant improvements in pain relief and functional status relative to commercially available immediate-release TA. Data from this 12-week dose-ranging clinical trial showed that Zilretta had a safety profile that was comparable to the standard of care immediate-release steroid. Patients were injected with 40 mg of immediate-release TA or 10, 40 or 60 mg of Zilretta. At the 8-week endpoint, the 40 mg dose of Zilretta demonstrated a statistically ( $p = 0.01$ ) and clinically significant improvement relative to immediate-release TA, and analyses of pre-specified secondary measures including pain, stiffness and function, patient global impression of change and clinician global impression of change also demonstrated statistical superiority. Additionally, the 40 mg dose of Zilretta produced pain relief that was improved at weeks 2-12 and statistically superior to immediate-release TA at weeks 5-10 ( $p < 0.05$  at each time point), and the time-weighted average of pain relief was statistically superior to immediate-release TA over weeks 1-12 ( $p = 0.04$ ). In summary, the extended residency of drug in the joint with 40 mg of Zilretta not only prolonged but also amplified analgesic effect relative to the standard of care. In June 2015, the final study results from this trial were published in the Journal of Bone and Joint Surgery (JBJS), a prominent orthopedic publication.

We previously completed two PK clinical studies of Zilretta that compared the duration of TA residency in the joint, systemic TA exposure, and effects on the hypothalamic-pituitary-adrenal, or HPA, axis, which determines the body's ability to make its own naturally occurring steroids, following a 3 mL injection of Zilretta or an injection of

the marketed formulation of immediate-release TA in patients with OA. The data from these clinical trials showed that at 6, 12 and 16 weeks, the Zilretta 40 mg dose groups had measurable concentrations of drug in synovial fluid. In contrast, the 40 mg immediate-release TA dose group at 6 and 12 weeks had concentrations of drug that were below the lower limit of quantitation, which means below the measurement capability of the assay. Data from one of these studies also demonstrated that Zilretta reduced systemic TA exposure and avoided the marked suppression of the HPA axis seen with commercially available steroid suspensions. In sum, these data suggest that IA administration of Zilretta prolongs exposure to TA in the joint and reduces systemic exposure relative to immediate-release TA in patients with OA.

In February 2017 we initiated a repeat-dose safety trial for Zilretta to evaluate the safety of repeat administration of Zilretta in patients with OA of the knee. The open-label, Phase 3b study is expected to enroll approximately 200 patients at up to 20 clinical sites in the United States. Participants will receive an initial intra-articular (IA) injection of Zilretta on Day 1 and will be evaluated at Weeks 12, 16, 20 and 24 to determine if they are eligible for a second IA injection of Zilretta. Participants who are eligible for repeat administration of Zilretta will be followed for a total of 52 weeks after the initial injection, regardless of when the second injection is administered.

At specified times throughout the study, participants will undergo physical examinations, knee assessments and X-rays. If Zilretta is approved, and the data from this trial are supportive, we intend to seek inclusion of these data in the label.

#### Regulatory Developments

In September 2015, we announced that the FDA had granted Fast Track Designation for Zilretta for the treatment of OA of the knee. The FDA's Fast Track program was designed to facilitate the development and expedite the review of new drugs that are intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs.

In May 2016, the FDA informed us that the safety and efficacy data from the registration program for Zilretta were acceptable to support the submission of an NDA. In December of 2016, we submitted the NDA for Zilretta and in February 2017, we announced that the FDA accepted the Zilretta NDA for filing with a user fee goal date under the Prescription Drug User Fee Act (PDUFA) of October 6, 2017. As part of routine NDA review activities, we are aware that a number of our contract manufacturing sites have received notices from the FDA to schedule pre-approval inspections associated with the Zilretta NDA.

#### Manufacturing

We believe that the multifaceted nature of PLGA drug product manufacturing and the limited number of capable contract manufacturing companies that offer PLGA drug product manufacturing provides a competitive advantage. The technology is designed to enable novel formulations of pharmaceuticals by providing extended-release of drugs over time and the physical properties of the polymer-drug matrix can be varied to achieve specified drug loads and release rates.

#### Zilretta

We utilize contract manufacturers to produce our drug substances, drug products used for preclinical and clinical supplies and commercial supplies of Zilretta. Manufacture of PLGA microspheres is a complex process and there are a limited number of contract manufacturing sites with PLGA experience. Our injectable IA extended-release technology

allows us to incorporate pharmaceuticals in PLGA microspheres for administration of Zilretta and potentially other product candidates. Following extensive development programs, we have generated formulations of Zilretta designed to sustain local concentrations of drug in the joint for several months. The Zilretta microsphere PLGA formulation has gone through numerous iterations and has been optimized to release the drug over an extended period of time. In developing this unique combination of manufacturing process and formulation, we have established numerous trade secrets that relate to precise pharmaceutical release profiles.

The active pharmaceutical ingredient in Zilretta, TA, is manufactured and supplied by Farmabios SpA in accordance with current good manufacturing practice standards, or cGMP. This supplier is subject to regular inspections by the FDA. The PLGA material used in the manufacture of our clinical trial supplies was Evonik Corporation, or Evonik. In August 2015, we entered into Manufacturing and Technical Transfer Agreements with Patheon U.K. Limited, or Patheon, for the manufacture of clinical and commercial supplies of Zilretta finished drug product. Under the terms of the Technical Transfer Agreement, Patheon agreed to undertake certain technical transfer activities and construction services needed to prepare its United Kingdom facility for the manufacture of Zilretta in dedicated manufacturing suites. We have agreed with Patheon, among other things, to provide them with the equipment necessary to manufacture Zilretta in these suites, to pay for construction of the suites, and to make payments related to their establishment and validation of manufacturing processes in the suites. Successful completion of manufacturing process validation at Patheon, along with FDA approval of the Patheon facility, must be secured prior to commercial launch of Zilretta.

Our Technical Transfer Agreement with Patheon expires upon completion of the build out and FDA approval of the dedicated manufacturing suites. We may terminate this agreement if Patheon does not meet certain construction and manufacturing milestones, or at any time for convenience upon 90 days' notice prior to FDA approval of the Patheon dedicated suite for the manufacture of Zilretta (the "FDA Approval Date"). Either we or Patheon may terminate this agreement in the event of an unremedied material breach by or bankruptcy of the other party or if a material force majeure event remains uncured for a period of more than 90 days. If the agreement is terminated before the FDA Approval Date, the Manufacturing Agreement will concurrently and automatically terminate. If we terminate the Technical Transfer Agreement for convenience prior to the FDA Approval Date, we would be obligated to pay Patheon a termination fee of 1.3 million British Pounds and pay for the costs associated with removing our manufacturing equipment and for Patheon's termination costs up to a specified maximum amount.

The initial term of the Manufacturing Agreement is 10 years from the FDA Approval Date. We may terminate this agreement upon one month's notice if a regulatory authority causes the withdrawal from, or halts development of, Zilretta (in either case for reasons outside our reasonable control) in the United States or any other market that represents 80% of our overall sales. We may also terminate this agreement at any time for convenience by providing (i) prior to the FDA Approval Date, three months' notice and, (ii) after the FDA Approval Date, 24 months' notice. Either we or Patheon may terminate this Agreement in the event of (a) an unremedied material breach or bankruptcy of the other party, (b) if a material force majeure event remains uncured for a period of more than 90 days and (c) the granting of a permanent injunction to a third party claiming intellectual property infringement of Zilretta in the United States or UK. Upon termination of this agreement, we are obligated to pay for the costs associated with the removal of our manufacturing equipment and for Patheon's termination costs up to a specified maximum amount.

### Commercial Strategy

In advance of potential drug approval of Zilretta, we intend to build a commercial infrastructure in the United States to effectively support the commercialization of Zilretta. We believe that we can effectively promote Zilretta to the approximately 7,500 orthopedists and rheumatologists who perform more than 80% of OA treatment injections in the United States with a targeted, sales force of approximately 100 representatives. Support for this team will include sales management, internal sales support, distribution support, and an internal marketing group. Additional requisite capabilities will include focused management of key accounts such as managed care organizations, pharmacy benefits managers, specialty pharmacies, group purchasing organizations, and government accounts.

Of patients who are treated for OA, it is estimated that 57% receive IA injections from orthopedic surgeons. An additional 7% of patients receive IA injections from physical medicine and rehabilitation (PM&R) specialists and rheumatologists. Approximately 12% are treated by PCPs, which includes Sports Medicine specialists. The remaining 24% of IA injections are administered by a wider array of physicians. We believe we can effectively cover all

specialties and successfully execute our future commercial plans using a cost-efficient strategy, particularly given that orthopedists and rheumatologists are familiar with IA injections utilizing the same steroid in the same dose.

In clinical trials completed to date, Zilretta has demonstrated clinically meaningful and significant improvements in validated OA specific measures compared to commercially available immediate-release TA. We believe Zilretta's prolonged analgesia could delay the need for TJA, a costly, highly-invasive procedure with a protracted recovery time. Our own market research has indicated that healthcare payors would be willing to reimburse any additional OA therapies that have the potential for pharmacoeconomic benefits reflecting differential efficacy and durability and the potential to delay costly and invasive TJAs. As a result of its potential to both provide increased patient satisfaction and to delay TJA, we believe Zilretta will be priced competitively with existing HA therapies.

## Competition

### Overview

Our industry is highly competitive and subject to rapid and significant technological change. The large size and expanding scope of the pain market makes it an attractive therapeutic area for biopharmaceutical businesses. Our potential competitors include pharmaceutical, biotechnology and specialty pharmaceutical companies. Several of these companies have robust drug pipelines, readily available capital, and established research and development organizations. We believe our success will be driven by our ability to develop and commercialize new treatment options that make a meaningful difference for patients with musculoskeletal conditions, beginning with OA. We continue to make solid progress towards the potential launch of Zilretta. Our core commercial team is in place and launch preparations are on schedule across the sales, marketing, market access and commercial operations functions.

The key competitive factors affecting the success of Zilretta, if approved, are likely to be efficacy, durability, safety, price and the availability of reimbursement from government and other third-party payors. We believe we will compete favorably by having a product candidate with:

- a validated mechanism of action for pain relief;
- extended-release technology that enables Zilretta and potentially other compounds to maintain persistent therapeutic concentrations in the joint and provide substantial and durable efficacy; and
- an acceptable safety profile with limited systemic exposures and the potential for fewer side effects.

### Zilretta Competition

Immediate-release steroids and HA are currently the two marketed classes of IA products that would compete with Zilretta, if approved. Immediate-release steroids are generic and widely used as a first line injectable therapy, but leave the joint rapidly after injection and typically fail to confer pain relief of sufficient magnitude or duration. Zilretta has demonstrated in clinical trials that it persists in the joint at therapeutic concentrations for at least 12 weeks following injection, whereas there was no measurable immediate-release TA in the joint by that time. In clinical trials, Zilretta also demonstrated clinically meaningful and statistically significant improvements compared to with immediate-release TA in validated OA specific measures. In addition to immediate-release steroids, Zilretta would compete with HA in patients considering something beyond an immediate-release steroid injection. The magnitude of pain relief demonstrated by Zilretta in clinical trials to date is much greater than that seen in historic HA clinical trials, in which HA demonstrated only marginal pain relief over placebo in knee OA patients, although to date Zilretta has not been evaluated in head-to-head clinical trials against HA. Also on the market are platelet rich plasma injections, but these require on site preparation from blood drawn from the patient, have generated questionable efficacy in controlled clinical trials and we believe they are unlikely to be a broadly embraced therapeutic option for OA patients. Because platelet rich plasma is a therapy derived from the individual patient's blood, it does not require and has not received FDA review or approval. For that reason, it is generally not reimbursed by payers and patients must pay out of pocket to receive this therapy.



In addition to marketed IA medications for OA, other companies have OA product candidates in advanced stages of clinical development. These IA products include:

•Anika Therapeutics, Inc.'s Cinga®, which is a mixture of Anika's Monovisc and a low dose of a commonly used immediate-release steroid. Anika filed a Pre-Market Application with the FDA for

13

---

Cingal based on a single pivotal clinical trial. In December 2015, Anika announced that due to the steroid component of the product, it will need to file this product candidate under an NDA.

• Carbylan Therapeutic's Hydros-TA, which is a mixture of Carbylan's own HA and a low dose of a commonly used immediate release steroid. In February 2016, Carbylan announced that Hydros-TA met only one of its two primary endpoints in its first Phase 3 study. In 2016, Carbylan merged into KalVista Pharmaceuticals, and we believe the continued development of Hydros-TA has been terminated.

• Actavis plc/Hanmi Pharmaceuticals Co., Ltd.'s HA product Hyalrheuma, which is an HA preparation.

• TissueGene, Inc.'s Invossa™, which is a combination of human allogeneic chondrocytes and TGF- $\beta$  1 transfected allogeneic chondrocytes. Invossa is currently in Phase 3 clinical studies.

• Ampio Pharmaceuticals, Inc.'s Ampion™, which is a derivative of human serum albumin, is described as having anti-inflammatory properties, and is formulated for immediate-release. Ampion did not meet its primary endpoint in a Phase 3 trial. We believe that other programs, such as Orthotrophix's TPX-100, Merck Serono's FGF-18, Abbvie's ABT-981, Menarini's MEN16132, Dong-A's DA-5202, Mariel Therapeutics BMP-7, Samumed's SM04690, Centrexion's CNTX-4975, and Allergan, Inc.'s botulinum toxin, have not yet entered Phase 3 clinical trials.

• Autologous cartilage transplantation products, like Carticel, are appropriate for focal defects in cartilage, not the kind of diffuse disease that is seen with OA. Eupraxia's EP-104 is a pre-clinical/Phase 1 therapy that combines an unapproved carrier technology (Plexis) with a steroid (fluticasone) that is approved for uses other than for the treatment of knee OA.

• Stem cell approaches to OA are being explored, but these are earlier in development, bear significant technical risks and it remains to be seen how applicable they will be to the treatment of OA. A number of investigational nerve growth factor antibodies are in development. In May 2016, Regeneron announced fasinumab had met its primary endpoints in its phase 2/3 clinical study in OA of the knee. In March 2016, Janssen announced it was discontinuing its Phase 3 development program for fulranumab.

Intellectual Property/Patents and Proprietary Rights

### Intellectual Property and Exclusivity

We seek to protect our product candidates and our technology through a combination of patents, trade secrets, proprietary know-how, FDA exclusivity and contractual restrictions on disclosure.

### Patents and Patent Applications

Our policy is to seek to protect the proprietary position of our product candidates by, among other methods, filing U.S. and foreign patent applications related to our proprietary technology, inventions and improvements that are important to the development of our business. U.S. patents generally have a term of 20 years from the earliest effective date of the application.

As of January 31, 2017, we owned three U.S. patents, one pending U.S. application, and counterpart foreign patent applications, along with two pending U.S. provisional patent applications, all directed to Zilretta. One issued U.S. patent directed to Zilretta relates to its composition of matter and has an expiration date in 2031. A second issued U.S. patent directed to Zilretta relates to methods of manufacturing Zilretta and has an expiration date in 2031. A third issued U.S. patent directed to Zilretta relates to methods of using Zilretta and has an expiration date in 2031. The Zilretta composition of matter patent is the result of several unique discoveries relating to a narrow drug load specification, a certain release profile of polymers, specific polymer weights and ratios and clinical efficacy observed within a dose-range. Further, for Zilretta, we have foreign patent applications pending in Australia, Canada, Europe, Japan, China and other foreign countries. Our pending U.S. non-provisional application could result in additional claims expiring in 2031. The two pending provisional applications directed to Zilretta could, if pursued as a non-provisional patent application, result in a patent expiring in 2037. We have also exclusively licensed issued patents, owned by SwRI, directed to our proprietary microsphere manufacturing technology which covers the

production of Zilretta. These patents are scheduled to expire in 2025.

We have other patent applications on formulations or uses of compounds that are not relevant to our current programs in development.

#### Trade Secrets and Proprietary Information

The Zilretta microsphere PLGA formulation has gone through numerous iterations and has been optimized to deliver the drug substance release over an extended period of time. In developing this unique combination of manufacturing process and formulation, we have established numerous trade secrets, including those that relate to a precise pharmaceutical release profile. In addition, due to the complexity of the extended-release technology and the time, costs and technical risks involved in demonstrating bioequivalence through clinical trials, we believe that the ability of manufacturers to gain market approval for generic alternatives to our products upon expiration of our patents and FDA exclusivity will be challenging.

We seek to protect our proprietary information, including our trade secrets and proprietary know-how, by requiring our employees to execute a Proprietary Information, Inventions, Non-Solicitation, and Non-Competition Agreement upon the commencement of their employment. Consultants and other advisors are required to sign consulting agreements. These agreements generally provide that all confidential information developed or made known during the course of the relationship with us be kept confidential and not be disclosed to third parties except in specific circumstances. In the case of our employees, the agreements also typically provide that all inventions resulting from work performed for us, utilizing our property or relating to our business and conceived or completed during employment shall be our exclusive property to the extent permitted by law. Further, we require confidentiality agreements from entities that receive our confidential data or materials.

Southwest Research Institute Manufacturing® (SwRI) License. In July 2014, Flexion executed an exclusive worldwide licensing agreement with SwRI to utilize proprietary microsphere manufacturing technologies for production of Flexion's extended-release drug candidates, including Zilretta. The SwRI technologies employ a uniquely controlled and continuous atomizing technology that will facilitate scale-up of commercial supply. This exclusive agreement provides for an expanded field of use in a variety of musculoskeletal disorders, as well as broader polymer and steroid ranges, which offers the flexibility to potentially explore different doses, disease indications, and drug-PLGA combinations. The license is non-royalty bearing and remains in effect through patent term expiry. Flexion made an up-front payment upon execution of this license and will pay an additional milestone payment upon FDA approval of Zilretta for knee OA. In February 2017, Flexion executed an agreement with SwRI to transfer manufacturing equipment to SwRI in consideration for SwRI deeming the additional milestone payment to have been fully paid by Flexion.

#### Government Regulation and Product Approval

Government authorities in the United States at the federal, state and local level, and in 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 are developing. Zilretta and any other drug candidate that we develop must be approved by the FDA before they may be legally marketed in the United States and by the corresponding foreign regulatory agencies before they may be legally marketed in foreign countries.

#### U.S. Drug Development Process

In the United States, the FDA regulates drugs under the FDCA and implementing regulations. Drugs 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 requires the

expenditure of substantial time and financial resources. Failure to comply with the applicable requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending applications, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement of profits 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 drug may be marketed in the United States generally involves the following:

- completion of preclinical laboratory tests, animal studies and formulation studies according to Good Laboratory Practices, or GLP, or other applicable regulations;
- submission to the FDA of an investigational new drug, or IND, application, which must become effective before human clinical trials may begin;
- approval by an independent institutional review board, or IRB, at each clinical site before each trial may be initiated;
- performance of adequate and well-controlled human clinical trials according to the FDA's laws and regulations pertaining to the conduct of human clinical studies, collectively referred to as Good Clinical Practices, or GCP, and according to the International Conference of Harmonization, or ICH, GCP guidelines, to establish the safety and efficacy of the proposed drug for its intended use;
- submission to the FDA of an NDA for a proposed new drug;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the drug is produced and tested to assess compliance with the FDA's cGMP requirements, to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- potential FDA audit of the non-clinical and clinical trial sites that generated the data in support of the NDA; and
- FDA review and approval of the NDA prior to any commercial marketing, sale or shipment of the drug.

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.

Before testing any compounds with potential therapeutic value in humans, the drug candidate enters the non-clinical testing stage, also referred to as preclinical testing. 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 drug candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLP. The investigational new drug application, or IND, 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, among other things, to the FDA as part of the IND. The IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial 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 drug candidate at any time before or during clinical trials due to safety concerns or non-compliance. Accordingly, we cannot be sure 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 trial.

Clinical trials involve the administration of the drug candidate to healthy subjects or patients with the target disease under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are conducted under written study 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 as part of the IND. Clinical trials must be conducted in accordance with the FDA's regulations which reflect the ICH GCP requirements. Further, each clinical trial must be reviewed and approved by an IRB at or servicing each institution at which the clinical trial will be conducted. An IRB 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 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 it is completed.

During the development of a new drug, sponsors are given opportunities to meet with the FDA at certain points. These points may be prior to submission of an IND, at the end of Phase 2, and before an NDA is submitted. Meetings at

other times may be requested. These meetings can provide an opportunity for the sponsor to share

information about the data gathered to date, for the FDA to provide advice, and for the sponsor and FDA to reach agreement on the next phase of development. Sponsors typically use the end of Phase 2 meeting to discuss their Phase 2 clinical results and present their plans for the pivotal Phase 3 clinical trials that they believe will support approval of the new drug.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

• **Phase 1.** The drug is initially 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, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted only in patients having the specific disease.

• **Phase 2.** The drug 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 for patients having the specific disease.

• **Phase 3.** The drug is administered to an expanded patient population in adequate and well-controlled clinical trials to generate sufficient data to statistically confirm the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product. Generally, at least two adequate and well-controlled Phase 3 clinical trials are required by the FDA for approval of an NDA. In some cases, the FDA has approved a drug based on the results of a single adequate and well-controlled Phase 3 study of excellent design and which provided highly reliable and statistically strong evidence of important clinical benefit, such as an effect on survival, and a confirmatory study would have been difficult to conduct on ethical grounds.

Post-approval studies, also referred to as 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 required by the FDA as part of the approval process.

Progress reports detailing the status of drug development and 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 or patients. 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 its data safety monitoring board (if applicable) may suspend a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB 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 requirements or if the drug has been associated with unexpected serious harm to study subjects.

Concurrent with clinical trials, companies usually complete additional animal studies and must also develop additional information about the chemistry and physical characteristics of the drug 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 drug candidate and, among other things, the manufacturer must develop methods for testing the safety, identity, strength, quality and purity of the final drug product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug candidate does not undergo unacceptable deterioration over its shelf life.

#### FDA Review and Approval Processes

The results of product development, preclinical studies and clinical studies for claimed indications as well as descriptions of the manufacturing process and controls, analytical tests conducted on the chemistry of the drug, proposed labeling and other relevant information are submitted to the FDA as part of an NDA requesting approval to



market the product. Additionally, the results of product development, preclinical studies and clinical trials for the claimed indications in all relevant pediatric subpopulations and the support for dosing and administration for each pediatric subpopulation for which the product is safe and effective, are contained in an NDA. The FDA may grant deferrals for submission of pediatric data or full or partial waivers after the initial submission of a pediatric study

plan following an end of Phase 2 meeting unless otherwise agreed upon by the FDA and the sponsor. The submission of an NDA is subject to the payment of substantial user fees; a waiver of such fees may be obtained under certain limited circumstances.

An NDA may also be submitted under the Fast Track program if the related product candidate has received Fast Track Designation from the FDA for the intended indication. The FDA's Fast Track program was designed to facilitate the development and expedite the review of new drugs that are intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs. Drugs with the Fast Track Designation generally qualify for priority review if supported by clinical data at the time of NDA filing, thereby expediting the FDA review process.

The FDA reviews all NDAs submitted before it accepts them for filing and may request additional information rather than accepting an NDA for filing. Applications submitted under the FDA's Fast Track program allow companies to submit completed sections of a related NDA on a rolling basis and are subject to the same review and acceptance procedures. Once the submission is complete and accepted for filing, the FDA begins an in-depth review of the NDA. Under the goals and policies agreed to by the FDA under the Prescription Drug User Fee Act, or PDUFA, the FDA has 12 months after submission of an NDA for a new molecular entity in which to complete its initial review of a standard NDA and respond to the applicant, and eight months for a priority review NDA. In addition, the FDA has 10 months after submission of an NDA for a non-new molecular entity in which to complete its initial review of a standard NDA and respond to the applicant, and six months for a priority review NDA. The FDA does not always meet its PDUFA goal dates for review of standard and priority review NDAs. The review process and the PDUFA goal date may be extended by additional three month review periods whenever the FDA requests or the NDA sponsor otherwise provides additional information or clarification regarding information already provided in the submission at any time during the review cycle.

The FDA reviews the NDA to determine, among other things, whether the proposed product is safe and effective for its intended use, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, strength, quality and purity. The FDA may refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the drug approval process, the FDA also will determine whether a risk evaluation and mitigation strategy, or REMS, is necessary to assure the safe use of the drug. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS; the FDA will not approve the NDA without a REMS, if required.

Before approving an NDA, the FDA will typically inspect the facilities at which the product is to be manufactured. When an inspection is undertaken, the FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with FDA regulations regarding conduct of clinical trials for the product's trials. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information.

The NDA review and approval process is lengthy and difficult and the FDA may refuse to approve an NDA 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 does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data, which could delay, limit or prevent regulatory approval. The FDA will

issue a “complete response” letter if the agency decides not to approve the NDA. The complete response letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application.

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 or REMS to assure safe use of the product through distribution or other controls. In addition, the FDA may require post approval studies, referred to as Phase 4 testing, which involves clinical trials designed to further assess a product's safety and effectiveness and may require testing and surveillance programs to monitor the safety of approved products that have been commercialized.

#### Post-Approval Requirements

Any drug products for which we 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. These promotion and advertising requirements include, among other things, standards for direct-to-consumer advertising, prohibitions against promoting drugs for uses or in patient populations that are not described in the drug's approved labeling (known as "off-label use"), rules for conducting 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. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such off-label uses.

We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products. Manufacturers of our products are required to comply with applicable FDA manufacturing requirements contained in the FDA's cGMP regulations. cGMP regulations require, among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation. Drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are also required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved NDA. These restrictions may include suspension of a product until the FDA is assured that quality standards can be met, continuing oversight of manufacturing by the FDA under a consent decree of permanent injunction, which frequently includes the imposition of costs and continuing inspections over a period of many years, as well as possible withdrawal of the product from the market. In addition, changes to the manufacturing process generally require prior FDA approval before being implemented. Other types of changes to the approved product, such as adding new indications and additional labeling claims, are also subject to further FDA review and approval.

#### Pharmaceutical Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any drug candidates for which we obtain regulatory approval. In the United States and markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend in part on the availability of coverage and adequate reimbursement from third-party payors.

In the United States, third-party payors include federal and state government payor programs, including Medicare and Medicaid, managed care providers, private health insurers and other organizations. The process for determining whether a third-party payor will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the third-party payor will pay for the drug product. Third-party payors may limit

coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drug products for a particular indication. Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the

medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. In addition, our drug candidates may not be considered medically necessary or cost-effective.

A third-party payor's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a drug product does not ensure that other payors also will provide coverage or an adequate reimbursement rate for the drug product. Adequate third party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

The cost of pharmaceuticals continues to generate substantial governmental and third-party payor interest. We expect that the pharmaceutical industry will continue experiencing pricing pressures due to the trend toward managed healthcare, the increasing influence of managed care organizations and additional legislative proposals. Third-party payors are increasingly challenging the prices charged for medical products and services and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. If these third-party payors do not consider our products to be cost-effective compared to other available therapies, they may not cover our products after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our products at a profit. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid healthcare costs, including price controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. Adoption of such controls and measures, and tightening of restrictive policies in jurisdictions with existing controls and measures, could limit payments for pharmaceuticals such as the drug candidates that we are developing and could adversely affect our net revenue and results.

Different pricing and reimbursement schemes exist in other countries. In the European Community, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national healthcare systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular drug candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on healthcare costs in general, and on prescription drugs in particular, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country. There can be no assurance that any country that has price controls or reimbursement limitations for drug products will allow favorable reimbursement and pricing arrangements for any Company.

### Healthcare Reform

In the United States and foreign jurisdictions, there have been a number of legislative and regulatory changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the United States federal and state levels that seek to reduce healthcare costs, improve healthcare quality or expand access to healthcare.

In the United States, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, changed the way Medicare covers and pays for pharmaceutical products. The MMA expanded Medicare coverage to include outpatient prescription drug purchases made by the elderly by establishing Medicare Part D and introduced a new reimbursement methodology based on average sales prices for physician administered drugs under Medicare Part B. In addition, the MMA provided authority for limiting the number of drugs that would be covered in any therapeutic class under the Medicare Part D program. Cost reduction initiatives and other provisions of this legislation could

decrease the coverage and reimbursement rate that we receive for any of our approved products. While the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own reimbursement rates. Therefore, any reduction in reimbursement that results from the Medicare Modernization Act may result in a similar reduction in payments from private payors.

In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act of 2010, or collectively PPACA, was enacted as a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for healthcare and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. Among the provisions of PPACA of importance to our potential drug candidates are the following:

- an annual, non-deductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts to negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the Federal Poverty Level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements under the federal Open Payments program, created under Section 6002 of PPACA, and its implementing regulations, that manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report annually to Centers for Medicare and Medicaid Services, or CMS, information related to "payments or other transfers of value" made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and that applicable manufacturers and applicable group purchasing organizations report annually to CMS ownership and investment interests held by physicians (as defined above) and their immediate family members;
- a requirement to annually report drug samples that manufacturers and distributors provide to physicians;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for non-compliance;
- an FDA-approval framework for follow-on biologic products;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board, which, if impaneled, would have authority to recommend certain changes to the Medicare program that do not affect coverage or quality, which, among other things, could result in reduced payments for prescription drugs and those recommendations could have the effect of law even if Congress does not act on the recommendations; and
- establishment of a Center for Medicare & Medicaid Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.



Since its enactment, there have been judicial and Congressional challenges to numerous provisions of PPACA. In January, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of PPACA. The Budget Resolution is not a law, but it is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of PPACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of PPACA that are repealed.

In addition, other legislative changes have been proposed and adopted since PPACA was enacted. For example, on August 2, 2011, the Budget Control Act of 2011 was enacted, which, among other things, created the Joint Select Committee on Deficit Reduction to recommend to Congress proposals in spending reductions. The Joint Select Committee on Deficit Reduction did not achieve a targeted deficit reduction of at least \$1.2 trillion for the years 2013 through 2021, triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. On January 2, 2013, the American Taxpayer Relief Act of 2012 was enacted, which, among other things, reduced Medicare payments to several providers and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These new laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on our customers and accordingly, our financial operations.

We expect that PPACA reform, as well as other healthcare reform measures that have been and may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, as well as additional downward pressure on the price that we receive for any approved product. There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices, including several recent U.S. Congressional inquiries and proposed bills designed to, among other things, increase drug pricing transparency, reduce the cost of drugs under Medicare, review relationships between pricing and manufacturer patient assistance programs, and reform government program drug reimbursement methodologies. Any reduction in reimbursement from Medicare or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products.

#### Other U.S. Healthcare Laws and Compliance Requirements

In the United States, our activities are subject to regulation by various federal, state and local authorities in addition to the FDA, including CMS, 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. For example, various activities, including but not limited to sales, marketing and scientific/educational grant programs, must comply with the anti-fraud and abuse provisions of the Social Security Act, the federal Anti-Kickback Statute, the federal False Claims Act and similar state laws, each as amended. Failure to comply with such requirements could potentially result in substantial penalties to us. Even if we structure our programs with the intent of compliance with such laws, there can be no certainty that we would not need to defend against enforcement or litigation, in light of the fact that there is significant enforcement interest in pharmaceutical companies in the United States, and some of the applicable laws are quite broad in scope.

The federal Anti-Kickback Statute prohibits any person or entity, including a prescription drug manufacturer (or a party acting on its behalf), from knowingly and willfully soliciting, receiving, offering or providing remuneration, directly or indirectly, to induce or reward either the referral of business, or the furnishing, recommending, or arranging

for the purchase, lease or order of a good, facility, item or service, for which payment may be made under a federal healthcare program, such as the Medicare or Medicaid program. This statute has been interpreted broadly to apply to arrangements between pharmaceutical manufacturers on the one hand and prescribers, purchasers, and formulary managers, among others, on the other. The term “remuneration” has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payments, ownership interests and providing anything

at less than its fair market value. Although there are a number of statutory exemptions and regulatory safe harbors protecting certain business arrangements from prosecution, the exemptions and safe harbors are drawn narrowly and strict compliance is required. Other practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Our practices may not in all cases meet all of the criteria for safe harbor protection from federal Anti-Kickback Statute liability. The reach of the Anti-Kickback Statute was broadened by PPACA, which, among other things, amended the intent requirement of the federal Anti-Kickback Statute such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA provided that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the federal False Claims Act (discussed below) or the civil monetary penalties statute, which imposes fines against any person who is determined to have presented or caused to be presented claims to a federal healthcare program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. Additionally, many states have adopted laws similar to the federal Anti-Kickback Statute, and some of these state prohibitions apply to referral of patients for healthcare items or services reimbursed by any third-party payor, not only the Medicare and Medicaid programs in at least some cases, and do not contain safe harbors.

Federal false claims and false statements laws, including the federal False Claims Act, prohibit, among other things, any person or entity from knowingly presenting, or causing to be presented, a false or fraudulent claim for items or services, including drugs, for payment to, or approval by, a federal healthcare program, including Medicare or Medicaid. The qui tam provisions of the False Claims Act allow a private individual to bring a civil action on behalf of the federal government alleging that the defendant has submitted a false claim to the federal government, and to share in any monetary recovery. In recent years, the number of suits brought by private individuals has increased dramatically. In addition, various states have enacted false claims laws analogous to the False Claims Act. Many of these state laws apply where a claim is submitted to any third-party payor and are not limited to claims submitted to a federal healthcare program. There are many potential bases for liability under the False Claims Act. Liability arises, primarily, when an entity knowingly submits, or causes another to submit, a false claim for reimbursement to the federal government. For example, the False Claims Act has been used to assert liability on the basis of inadequate care, kickbacks and other improper referrals, improperly reported government pricing metrics such as Best Price or Average Manufacturer Price, improper use of Medicare numbers when detailing the provider of services, improper promotion of off-label uses (i.e., uses not expressly approved by FDA in a drug's label), and allegations as to misrepresentations with respect to the services rendered. Our future activities relating to the reporting of discount and rebate information and other information affecting federal, state and third party reimbursement of any of our future products, and the sale and marketing of our future products and potential data purchases, among other activities, may be subject to scrutiny under these laws. We are unable to predict whether we would be subject to actions under the False Claims Act or a similar state law, or the impact of such actions. However, the cost of defending such claims, as well as any sanctions imposed, could adversely affect our financial performance. Also, the Health Insurance Portability and Accountability Act of 1996, or HIPAA, created several new federal crimes, including healthcare fraud and false statements relating to healthcare matters. The healthcare fraud statute prohibits knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, including third-party payors. The false statements statute prohibits knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services.

We may also be subject to various federal and state marketing expenditure tracking and reporting laws, which generally require certain types of payments and other transfers of value, among other things, provided to physicians, other healthcare professionals, and healthcare entities in the United States to be tracked and reported. Compliance with such requirements may require investment in infrastructure to ensure that tracking and reporting is performed properly, and some of these laws result in the public disclosure of the reported information and relationships. Several

states have enacted legislation requiring pharmaceutical companies to, among other things, establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, or register their sales representatives, as well as prohibiting pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and prohibiting certain other sales and marketing practices. These laws may affect our sales, marketing, and other promotional activities by imposing administrative and compliance

burdens on us. If we fail to track and report as required by these laws or otherwise comply with these laws, we could be subject to the penalty provisions of the pertinent state and federal authorities.

Where our activities involve foreign government officials, they may also potentially be subject to the Foreign Corrupt Practices Act, which prohibits companies and individuals from engaging in specified activities to obtain or retain business or to influence a person working in an official capacity. Under the FCPA, it is illegal to pay, offer to pay, or authorize the payment of anything of value to any foreign government official, governmental staff members, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls.

If we seek to have a product covered in the United States by the Medicaid programs, various obligations, including government price reporting, are required under the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veterans Health Care Act of 1992, each as amended, which generally require products to be offered at substantial rebates/discounts to such programs and certain purchasers. In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Many of our current as well as possible future activities are potentially subject to federal and state consumer protection and unfair competition laws. We must also comply with laws that require clinical trial registration and reporting of clinical trial results on the publicly available clinical trial databank maintained by the National Institutes of Health at [www.ClinicalTrials.gov](http://www.ClinicalTrials.gov). We are subject to various environmental, health and safety regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous substances. From time to time, and in the future, our operations may involve the use of hazardous materials.

Because of the breadth of these laws and the narrowness of available statutory and regulatory exemptions, it is possible that some of our business activities could be subject to challenge under one or more of such laws. If our operations are found to be in violation of any of the federal and state laws described above or any other governmental regulations that apply to us, we may be subject to significant penalties, including the imposition of significant civil, criminal and administrative penalties, damages, fines, disgorgement, individual imprisonment, exclusion from participation in government healthcare programs, contractual damages, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, private “qui tam” actions brought by individual whistleblowers in the name of the government, refusal to allow us to enter into supply contracts, including government contracts, reputational harm, diminished profits and future earnings, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

To the extent that any of our products are sold in a foreign country, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

#### U.S. Marketing Exclusivity

Hatch-Waxman Exclusivity. Market exclusivity provisions under the FDCA can also delay the submission or the approval of certain applications of other companies seeking to reference another company's NDA. If the new drug is a new chemical entity subject to an NDA, the FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period,

the FDA may not accept for review an abbreviated new drug application, or ANDA, or a Section 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, such an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder. The FDCA also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

#### Rest of World Government Regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our future products.

Whether or not we obtain FDA approval for a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

#### Employees

As of December 31, 2016, we had 95 full-time employees. None of our employees is represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

#### Research and Development

We invested \$41.3 million, \$32.7 million, and \$17.9 million in research and development in the years ended December 31, 2016, 2015 and 2014, respectively.

#### Corporate and Other Information

We were incorporated in Delaware in November 2007. Our principal executive offices are located at 10 Mall Road, Suite 301, Burlington, Massachusetts 01803, and our telephone number is (781) 305-7777. Our corporate website address is [www.flexiontherapeutics.com](http://www.flexiontherapeutics.com). Information contained on or accessible through our website is not a part of this Annual Report, and the inclusion of our website address in this Annual Report is an inactive textual reference only. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to reports filed pursuant to Sections 13(a) and 15(d) of the Exchange Act are available free of charge on our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We also regularly post copies of our press releases as well as copies of presentations and other updates about our business on our website at [www.flexiontherapeutics.com](http://www.flexiontherapeutics.com). Information contained in our website does not constitute a part of this Annual Report or our other filings with the SEC. The SEC maintains an internet site that contains our

public filings with the SEC and other information regarding our company, at [www.sec.gov](http://www.sec.gov). These reports and other information concerning our company may also be accessed at the SEC's Public Reference Room at



100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

This Annual Report contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this Form 10-K, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

#### Item 1A. Risk Factors

Certain factors may have a material adverse effect on our business, financial condition and results of operations, and you should carefully consider them. Accordingly, in evaluating our business, we encourage you to consider the following discussion of risk factors, in its entirety, in addition to other information contained in this Annual Report as well as our other public filings with the Securities and Exchange Commission.

##### Risks Related to Our Financial Condition and Need for Additional Capital

We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future.

We have limited operating history. To date, we have focused primarily on developing our lead product candidate, Zilretta. Any additional product candidates we develop will require substantial development time and resources before we would be able to apply for or receive regulatory approvals and begin generating revenue from product sales. We have incurred significant net losses in each year since our inception, including net losses of \$71.9 million, \$46.3 million, and \$27.3 million for fiscal years 2016, 2015, and 2014, respectively. As of December 31, 2016, we had an accumulated deficit of \$211.7 million.

We have devoted most of our financial resources to product development, including our non-clinical development activities and clinical trials. To date, we have financed our operations exclusively through the sale of equity securities and debt. The size of our future net losses will depend, in part, on the rate of future expenditures and our ability to generate revenue. To date, none of our product candidates have been commercialized, and if our product candidates are not successfully developed or commercialized, or if revenue is insufficient following marketing approval, we will not achieve profitability and our business may fail. Even if we successfully obtain regulatory approval to market our product candidates in the United States, our revenue is also dependent upon the size of the markets outside of the United States, as well as our ability to obtain marketing approval and achieve commercial success.

We expect to continue to incur substantial and increased expenses as we continue our development activities with respect to Zilretta and as we scale up manufacturing for and prepare to commercialize Zilretta. We also expect a continued increase in our expenses associated with our operations as a publicly-traded company. As a result of the foregoing, we expect to continue to incur significant and increasing losses and negative cash flows for the foreseeable future.

We have never generated any revenue and may never be profitable.

Our ability to generate revenue and achieve profitability depends on our ability, alone or with collaborators, to successfully complete the development of, obtain the necessary regulatory approvals for, and commercialize Zilretta and other product candidates. We will not be able to generate revenue from sales of Zilretta until such time, if ever, that we receive marketing approval. Our ability to generate future revenue from product sales depends heavily on our success in:

- obtaining regulatory approval for Zilretta as well as other product candidates; and
- launching and commercializing any product candidates for which we receive regulatory approval, either by building our own targeted sales force or by collaborating with third parties.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to predict the timing or amount of increased expenses, when, or if, we will begin to generate revenue from product sales, or when, or if, we will be able to achieve or maintain profitability. In addition, our expenses could increase beyond expectations if we are required by the FDA to perform studies in addition to those that we currently anticipate. In particular, the FDA may not agree with our assessment of the clinical data for Zilretta and could require us to

complete additional trials prior to approving our NDA, which would be costly to complete and would delay our ability to eventually receive regulatory approval and generate revenue from product sales.

Even if one or more of our potential future product candidates is approved for commercial sale, to the extent we do not engage a third party collaborator, we anticipate incurring significant costs associated with commercializing any approved product candidate. Even if we are able to generate revenue from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations.

If we fail to obtain additional financing, we would be forced to delay, reduce or eliminate our product development programs and planned commercialization activities.

Developing and commercializing pharmaceutical products, including conducting preclinical studies and clinical trials, and building and maintaining sales and marketing capabilities, is expensive. We expect our expenses to substantially increase in connection with our ongoing activities, particularly as we advance our clinical programs, including our on-going and planned clinical trials for Zilretta, continue our manufacturing scale-up activities and build a sales and marketing organization to commercialize Zilretta.

As of December 31, 2016, we had cash, cash equivalents and marketable securities of \$210.3 million and working capital of \$192.3 million. Based upon our current operating plan, we believe that our existing cash, cash equivalents and marketable securities will enable us to fund our operating expenses and capital requirements for at least the next twelve months from the issuance date of these financial statements, including through the PDUFA action goal date of our NDA for Zilretta. Regardless of our expectations as to how long our cash, cash equivalents and marketable securities will fund our operations, changing circumstances beyond our control may cause us to consume capital more rapidly than we currently anticipate. For example, our clinical trials may encounter technical, enrollment or other difficulties that could increase our development costs more than we expect or the FDA could impose additional or different clinical development requirements on us prior to approving an NDA for Zilretta. In any event, we may require additional capital prior to commercializing Zilretta or any of our other product candidates.

Attempting to secure additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop and commercialize our product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we are unable to raise additional capital when required or on acceptable terms, we may be required to:

- significantly delay, scale back or discontinue the development or commercialization of our product candidates;
- seek corporate partners for our product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available;
- relinquish or license on unfavorable terms, our rights to technologies or product candidates that we otherwise would seek to develop or commercialize ourselves; or
- significantly curtail, or cease, operations.

If we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we will be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects.

We may sell additional equity or debt securities to fund our operations, which may result in dilution to our stockholders and impose restrictions on our business.

In order to raise additional funds to support our operations, we may sell additional equity or debt securities, which could adversely impact our existing stockholders as well as our business. The sale of additional equity or convertible debt securities would result in the issuance of additional shares of our capital stock and dilution to all of our stockholders. The incurrence of indebtedness would result in increased fixed payment obligations and could also result in certain restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely

impact our ability to conduct our business.

28

---

Our credit and security agreement with MidCap Financial SBIC, LP, or MidCap, and Silicon Valley Bank contains restrictions that limit our flexibility in operating our business. We may be required to make a prepayment or repay the outstanding indebtedness earlier than we expect under our credit and security agreement if a prepayment event or an event of default occurs, including a material adverse change with respect to us, which could have a materially adverse effect on our business.

On August 4, 2015, we entered into a credit and security agreement with MidCap, as administrative agent, MidCapFunding XIII Trust and Silicon Valley Bank, as agent lenders, to borrow up to \$30.0 million and contemporaneously drew down \$15.0 million under the credit facility. The agreement contains various covenants that limit our ability to engage in specified types of transactions. These covenants limit our ability to, among other things:

- incur or assume certain debt;
- merge or consolidate or acquire all or substantially all of the capital stock or property of another entity;
  - enter into any transaction or series of related transactions that would be deemed to result in a change in control of us under the terms of the agreement;
- change the nature of our business;
- change our organizational structure or type;
- amend, modify or waive any of our organizational documents;
- license, transfer or dispose of certain assets;
- grant certain types of liens on our assets;
- make certain investments;
- pay cash dividends;
- enter into material transactions with affiliates; and
- amend or waive provisions of material agreements in certain manners.

The restrictive covenants of the agreement could cause us to be unable to pursue business opportunities that we or our stockholders may consider beneficial.

A breach of any of these covenants could result in an event of default under the agreement. As of December 31, 2016 we were in compliance with these covenants. An event of default will also occur if, among other things, a material adverse change in our business, operations or condition occurs, which could potentially include negative results in our future clinical trials or unfavorable determinations by the FDA with respect to the potential approval of Zilretta, or a material impairment of the prospect of our repayment of any portion of the amounts we owe under the agreement occurs. In the case of a continuing event of default under the agreement, the lenders could elect to declare all amounts outstanding to be immediately due and payable, proceed against the collateral in which we granted the lenders a security interest under the agreement, or otherwise exercise the rights of a secured creditor. Amounts outstanding under the agreement are secured by all of our existing and future assets, excluding intellectual property, which is subject to a negative pledge arrangement.

We may not have enough available cash or be able to raise additional funds on satisfactory terms, if at all, through equity or debt financings to repay our indebtedness at the time any such repayment is required. In such an event, we may be required to delay, limit, reduce or terminate our product development or commercialization efforts or grant to others rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. Our business, financial condition and results of operations could be materially adversely affected as a result.

## Risks Related to Clinical Development and Regulatory Approval

We are substantially dependent on the success of our lead product candidate Zilretta. We cannot give any assurance that Zilretta will receive regulatory approval, which is necessary before it can be commercialized.

Our business and future success is substantially dependent on our ability to successfully develop, obtain regulatory approval for, and successfully commercialize Zilretta, for which we have submitted an NDA following completion of pivotal Phase 2b and Phase 3 clinical trials. Any delay or setback in the development or regulatory approval of Zilretta, could adversely affect our business and cause our stock price to decline. We cannot assure you that we will be able to obtain approval for Zilretta from the FDA.

Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results. Clinical failure can occur at any stage of clinical development.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical trial process. The results of preclinical studies and early clinical trials of our product candidates may not be predictive of the results of subsequent clinical trials. In particular, the results generated in our completed Zilretta pivotal Phase 3 clinical trial does not ensure that any on-going or future Zilretta clinical trial will be successful or consistent with the results generated in the Phase 3 trial.

We have conducted preclinical toxicology studies in healthy dogs with single and repeat doses of Zilretta, blank microspheres and immediate-release TA. The immediate-release TA and Zilretta groups produced similar findings in these studies. In the single-dose study, local cartilage findings of reduced extracellular matrix were completely reversed by the end of the nine-month recovery period in both the Zilretta and immediate-release TA study arms. With repeat administrations of Zilretta and immediate-release TA, a larger reduction in extracellular matrix in cartilage partially recovered by six months following the last dose; however, structural changes in cartilage were observed with repeat administrations of both Zilretta and immediate-release TA. Repeat administration of immediate-release TA has a long history of safe clinical use in patients with OA, and in a randomized, double-blind clinical trial conducted in 2003 by Raynauld et al, administration of immediate-release TA or saline every three months for up to two years in 68 OA patients was well-tolerated and demonstrated no deleterious effects in the knee joint when assessed by clinical exam and X-ray evaluation. Using a more sensitive MRI imaging technology in 2015, Driban et al again demonstrated that cartilage structure changes between OA patients treated with immediate-release TA and saline in patients were similar. We are studying Zilretta in a repeat dose safety clinical trial and Zilretta is approved and the data from the repeat dose trial are supportive we intend to seek inclusion of these data in the label. It is possible that we could observe detrimental effects on cartilage with repeated doses of Zilretta, similar to those outcomes observed in our preclinical studies, which would limit Zilretta's commercial potential and could harm our ability to maintain regulatory approval.

Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy traits despite having progressed through preclinical studies and initial clinical trials. In addition to the safety and efficacy traits of any product candidate, clinical trial failures may result from a multitude of factors including flaws in trial design, dose selection, placebo effect and patient enrollment criteria. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we or our collaborators may decide, or regulators may require us, to conduct additional clinical trials or preclinical studies. We cannot guarantee that we won't be required to conduct an additional pivotal trial which would delay our approval timeline and result in additional development costs. In addition, data obtained from trials and studies are susceptible to varying interpretations, and regulators may not interpret our data as favorably as we do, which may delay, limit or prevent regulatory approval. In any event, our future clinical trials may not be successful.

If Zilretta or any other product candidate is found to be unsafe or lack efficacy, we will not be able to obtain regulatory approval for it and our business would be materially harmed. If the results of any of our on-going or future clinical trials for Zilretta demonstrate unexpected safety findings or do not achieve the primary efficacy endpoint, the prospects for approval of Zilretta, or the commercial potential for Zilretta, if approved, as well our stock price and our ability to create stockholder value would be materially and adversely affected.



If the FDA does not conclude that Zilretta satisfies the requirements for the Section 505(b)(2) regulatory approval pathway, or if the requirements for Zilretta under Section 505(b)(2) are not as we expect, the approval pathway for Zilretta will likely take significantly longer, cost significantly more and entail significantly greater complications and risks than anticipated, and in either case may not be successful.

Our Zilretta NDA seeks FDA approval through the Section 505(b)(2) regulatory pathway. The Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Amendments, added Section 505(b)(2) to the FDCA. Section 505(b)(2) permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference.

Even though we have submitted our Zilretta NDA under Section 505(b)(2) regulatory pathway, we may still need to conduct additional trials and we cannot guarantee that Zilretta will receive the requisite approvals for commercialization. If this were to occur, the time and financial resources required to obtain FDA approval for Zilretta, and complications and risks associated with Zilretta, would likely substantially increase. We may also need to obtain additional funding, which could result in significant dilution to the ownership interests of our then existing stockholders to the extent we issue equity securities or convertible debt. We cannot assure you that we would be able to obtain such additional financing on terms acceptable to us, if at all. Moreover, any delays could result in new competitive products reaching the market faster than Zilretta, which could materially adversely impact our competitive position and prospects.

In addition, notwithstanding the approval of a number of products by the FDA under Section 505(b)(2) over the last few years, some pharmaceutical companies and others have objected to the FDA's interpretation of Section 505(b)(2). If the FDA's interpretation of Section 505(b)(2) is successfully challenged, the FDA may be required to change its Section 505(b)(2) policies and practices, which could delay or even prevent the FDA from approving any NDA that we submit under Section 505(b)(2), including our NDA submission for Zilretta.

Delays in clinical trials are common and have many causes, and any delay could result in increased costs to us and jeopardize or delay our ability to obtain regulatory approval and commence product sales.

We may experience delays in clinical trials of our product candidates. Our clinical trials may not begin on time, have an effective design, enroll a sufficient number of patients, or be completed on schedule, if at all. Our clinical trials can be delayed for a variety of reasons, including:

- inability to raise funding necessary to initiate or continue a trial;
- delays in obtaining regulatory approval to commence a trial;
- delays in reaching agreement with the FDA on final trial design;
- imposition of a clinical hold for safety reasons or following an inspection of our clinical trial operations or trial sites by the FDA or other regulatory authorities;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites;
- delays in obtaining required institutional review board approval at each site;
- delays in recruiting suitable patients to participate in a trial;
- delays in having patients complete participation in a trial or return for post-treatment follow-up;
- clinical sites dropping out of a trial to the detriment of enrollment;
- time required to add new clinical sites; or
- delays by our contract manufacturers to produce and deliver sufficient supply of clinical trial materials.

For example, our previously completed Phase 2b dose-ranging clinical trial for Zilretta was initially subject to a clinical hold imposed by the FDA due to the observation of effects of PLGA microspheres on synovial tissue from

Zilretta injections. While we were able to begin enrollment initially at non-U.S. sites and later at U.S. sites after the

31

---

clinical hold was lifted without restriction by the FDA, the hold delayed our completion of the trial and resulted in additional expense. Also in September 16, 2014, the FDA notified us that it had placed a clinical hold on the Zilretta IND due to a single occurrence of what was then reported to be septic arthritis, an infection of the injected knee joint, of a patient in the clinical trial. While the clinical hold was lifted on December 1, 2014 following our successful completion of testing and investigation requested by the FDA, the hold delayed the completion of our previously completed pivotal Phase 2b clinical trial and delayed the initiation of our recently completed pivotal Phase 3 clinical trial.

If initiation or completion of our clinical trials are delayed for any of the above reasons or other reasons, our development costs may increase, our approval process could be delayed and our ability to commercialize and commence sales of our product candidates could be materially harmed, which could have a material adverse effect on our business.

Our product candidates may cause adverse events or have other properties that could delay or prevent their regulatory approval or limit the scope of any approved label or market acceptance.

Adverse events, or AEs, caused by our product candidates or other potentially harmful characteristics of our product candidates could cause us, other reviewing entities, clinical trial sites or regulatory authorities to interrupt, delay or halt clinical trials and could result in the denial of regulatory approval.

For example, while no serious adverse events, or SAEs, assessed as related to study drug have been observed in any of our completed clinical trials of Zilretta to date, there have been some AEs assessed as at least possibly related to the study drug. Excluding our recently completed Phase 3 clinical trial, the most common AEs that were observed in greater than five percent of the Zilretta patients in our completed studies were arthralgia (pain in any joint) and headache and were generally mild to moderate in severity. If drug-related SAEs are observed in any of our clinical trials, our ability to obtain regulatory approval for our product candidates may be adversely impacted.

Further, if any of our approved products cause serious or unexpected side effects after receiving market approval, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval of the product or impose restrictions on its distribution in the form of a modified Risk Evaluation and Mitigation Strategy;
- regulatory authorities may require the addition of labeling statements, such as warnings or contraindications;
- we may be required to change the way the product is administered or conduct additional clinical studies;
- we could be sued and held liable for harm caused to patients; or
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the affected product candidate and could substantially increase the costs of commercializing our product candidates.

The regulatory approval processes of the FDA is lengthy, time consuming and inherently unpredictable, and if we are ultimately unable to obtain regulatory approval for our product candidates, our business will be substantially harmed.

The time required to obtain approval by the FDA and comparable foreign authorities is unpredictable but typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the substantial discretion of the regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. For example, we cannot guarantee that the FDA will not require additional or different clinical trials in support of our NDA for Zilretta despite the most recent guidance we have received from the FDA. We have not obtained regulatory approval for any product candidate, and it is possible that neither Zilretta or

any product candidates or any product candidates we may seek to develop in the future will ever obtain regulatory approval.

Our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA or comparable foreign regulatory authorities may disagree with the design, scope or implementation of our clinical trials;
- we may be unable to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA or comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- the data collected from clinical trials of our product candidates may not be sufficient to support the submission of an NDA or other submission or to obtain regulatory approval in the United States or elsewhere;
- the FDA or comparable foreign regulatory authorities may fail to approve the manufacturing processes or facilities of third party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may change significantly in a manner rendering our clinical data insufficient for approval.

The lengthy approval process, as well as the unpredictability of future clinical trial results, may result in our failing to obtain regulatory approval to market Zilretta or our other product candidates, which would harm our business, results of operations and prospects significantly.

In addition, even if we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request, may not approve the price we 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 the foregoing scenarios could harm the commercial prospects for our product candidates. For example, we believe that any initial indication of Zilretta will be limited to the treatment of knee OA, as opposed to the treatment of OA generally. We will likely need to conduct additional clinical trials in order to market Zilretta for other indications and expand its market potential. In addition, we are choosing to pursue an initial approval of Zilretta for single-dose administration. While we intend to develop and submit clinical data for repeated dosing of Zilretta in a supplemental NDA, if we were unable to expand the label for Zilretta to include repeat dosing, our ability to fully market Zilretta would be limited.

Our product candidates may not receive regulatory approval despite successful in clinical trials. If we do not receive regulatory approval for our product candidates, we may not be able to continue our operations. Even if we successfully obtain regulatory approval to market one or more of our product candidates, our revenue will be dependent, to a significant extent, upon the size of the markets in the territories for which we gain regulatory approval. If the markets for patients or indications that we are targeting are not as significant as we estimate, we may not generate significant revenue from sales of such products, if approved.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses.

If any of our potential future product candidates are approved and we are found to have improperly promoted off-label uses for any such products, we may become subject to significant liability. The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products, such as our potential future product candidates, if approved. In particular, a product may not be promoted for uses that are not approved by the FDA or such other regulatory agencies as reflected in the product's approved labeling. The federal



government has levied large civil and criminal fines against companies related to allegations of improper promotion of off-label use and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. If we cannot successfully manage the promotion of our potential future product candidates, if approved, we could become subject to significant liability, which would materially adversely affect our business and financial condition.

Even if we obtain regulatory approval for Zilretta or other product candidates, we will still face extensive regulatory requirements and our products may face future development and regulatory difficulties.

Even if we obtain regulatory approval in the United States, the FDA may still impose significant restrictions on the indicated uses or marketing of our potential future product candidates, or impose ongoing requirements for potentially costly post-approval studies or post-market surveillance. Zilretta and our other potential future product candidates, if approved, will also be subject to ongoing FDA requirements governing the labeling, packaging, storage, distribution, safety surveillance, advertising, promotion, record-keeping and reporting of safety and other post-market information. The holder of an approved NDA is obligated to monitor and report AEs and any failure of a product to meet the specifications in the NDA. The holder of an approved NDA must also submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling or manufacturing process. Advertising and promotional materials must comply with FDA rules and are subject to FDA review, in addition to other potentially applicable federal and state laws.

In addition, manufacturers of drug products and their facilities are subject to payment of user fees and continual review and periodic inspections by the FDA and other regulatory authorities for compliance with current good manufacturing practices, or cGMP, and adherence to commitments made in the NDA. If we or a regulatory agency discovers previously unknown problems with a product, such as AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory agency may impose restrictions relative to that product or the manufacturing facility, including requiring recall or withdrawal of the product from the market or suspension of manufacturing.

If we fail to comply with applicable regulatory requirements following approval of a product candidate, a regulatory agency may:

- issue a warning letter asserting that we are in violation of the law;
- seek an injunction or impose civil or criminal penalties or monetary fines;
- suspend or withdraw regulatory approval;
- suspend any ongoing clinical trials;
- refuse to approve a pending NDA or supplements to an NDA submitted by us;
- seize product; or
- refuse to allow us to enter into supply contracts, including government contracts.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity. The occurrence of any event or penalty described above may inhibit our ability to commercialize our products and generate revenue.

Any relationships with healthcare professionals, principal investigators, consultants, actual and potential customers, and third-party payors in connection with our current and future business activities are and will continue to be subject, directly or indirectly, to federal and state healthcare laws. If we are unable to comply, or have not fully complied, with such laws, we could face criminal sanctions, civil penalties, administrative penalties, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations.

Our operations may be directly or indirectly subject to various federal and state healthcare laws, including without limitation, fraud and abuse laws, false claims laws, marketing expenditure tracking and disclosure (or



“sunshine”) laws, government price reporting, and health information privacy and security laws. If we obtain FDA approval for any of our potential future product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance are also likely to increase. These laws may impact, among other things, our current activities with investigators and research subjects, as well as proposed sales, marketing, promotion, manufacturing, distribution, pricing, discounting, customer, incentive programs, education programs and other business arrangements and activities. In addition, we may be subject to patient privacy regulation by the federal government and by the U.S. states and foreign jurisdictions in which we conduct our business. The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, individuals and entities from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual, or the purchase, order or recommendation of an item or service for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs;
- federal civil and criminal false claims laws and civil monetary penalties laws, including the civil False Claims Act, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, to the federal government claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which imposes criminal and civil liability for, among other things, executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;
- HIPAA, as amended by the Health Information Technology and Clinical Health Act of 2009, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their business associates that perform services involving the use or disclosure of individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information;
- the federal Open Payments program, created under Section 6002 of the PPACA, and its implementing regulations, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with certain exceptions) to report annually to CMS information related to “payments or other transfers of value” made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and applicable manufacturers and applicable group purchasing organizations to report annually to CMS ownership and investment interests held by physicians (as defined above) and their immediate family members;
- state and foreign law equivalents of each of the above federal laws and regulations, such as anti-kickback and false claims laws which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers; state and foreign laws that require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, and often are not preempted by HIPAA, thus complicating compliance efforts;
- the Foreign Corrupt Practices Act, a U.S. law which regulates certain financial relationships with foreign government officials (which could include, for example, certain medical professionals);
- federal and state consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and

state and federal government price reporting laws that require us to calculate and report complex pricing metrics to government programs, where such reported prices may be used in the calculation of reimbursement, rebates and/or discounts on our marketed drugs (participation in these programs and compliance with the applicable requirements may subject us to potentially significant discounts on our products, increased infrastructure costs, and potentially limit our ability to offer certain marketplace discounts).

Efforts to ensure that our business arrangements with third parties will comply with applicable healthcare laws and regulations may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including, without limitation, civil, criminal, and administrative penalties, damages, fines, disgorgement, imprisonment, possible exclusion from participation in Medicare, Medicaid and other government healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Even if we obtain FDA approval for Zilretta or any other potential future product candidate in the United States, we may never obtain approval for or commercialize our potential future product candidates outside of the United States, which would limit our ability to realize their full market potential.

In order to market any potential future products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and efficacy. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional administrative review periods. Seeking foreign regulatory approval could result in difficulties and costs for us and require additional non-clinical studies or clinical trials which could be costly and time consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our potential future products in those countries. We do not have any potential future product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approval in international markets are delayed, our target market will be reduced and our ability to realize the full market potential of our potential future products will be harmed.

If we fail to develop, acquire or in-license other potential future product candidates or products, our business and prospects will be limited.

Our long-term growth strategy is to develop, acquire or in-license and commercialize a portfolio of potential future product candidates in addition to Zilretta. . Our primary means of expanding our pipeline of product candidates is to develop improved formulations and delivery methods for existing FDA-approved products and/or select and acquire or in-license product candidates for the treatment of therapeutic indications that complement or augment our current pipeline, or that otherwise fit into our development or strategic plans on terms that are acceptable to us. Developing new formulations of existing potential future product candidates or identifying, selecting and acquiring or licensing promising product candidates requires substantial technical, financial and human resources expertise. Efforts to do so may not result in the actual development, acquisition or license of a particular product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. If we are unable to add additional product candidates to our pipeline, our long-term business and prospects will be limited.



### Risks Related to Our Reliance on Third Parties

We rely on third parties to conduct our preclinical studies and clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates and our business could be substantially harmed.

We rely upon and plan to continue to rely upon third party CROs to monitor and manage data for our preclinical and clinical programs. We rely on these parties for execution of our preclinical studies and clinical trials, and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal, regulatory and scientific standards and our reliance on the CROs does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with FDA laws and regulations regarding current good clinical practice, or GCP, which are also required by the Competent Authorities of the Member States of the European Economic Area and comparable foreign regulatory authorities in the form of International Council on Harmonization guidelines for all of our products in clinical development. Regulatory authorities enforce GCP through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials comply with GCP regulations. In addition, our clinical trials must be conducted with product produced under cGMP regulations. While we have agreements governing activities of our CROs, we have limited influence over their actual performance. In addition, portions of the clinical trials for our product candidates are being conducted outside of the United States, which will make it more difficult for us to monitor CROs and perform visits of our clinical trial sites and will force us to rely heavily on CROs to ensure the proper and timely conduct of our clinical trials and compliance with applicable regulations, including GCP. Failure to comply with applicable regulations in the conduct of the clinical trials for our product candidates may require us to repeat clinical trials, which would delay the regulatory approval process.

Some of our CROs have an ability to terminate their respective agreements with us if, among other reasons, it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated. If any of our relationships with these third party CROs terminate, we may not be able to enter into arrangements with alternative CROs or to do so on commercially reasonable terms. In addition, our CROs are not our employees, and except for remedies available to us under our agreements with such CROs, we cannot control whether or not they devote sufficient time and resources to our preclinical and clinical programs. If CROs do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, our clinical trials may be extended, delayed or terminated and we may not be able to obtain regulatory approval for or successfully commercialize our product candidates. Consequently, our results of operations and the commercial prospects for our product candidates would be harmed, our costs could increase substantially and our ability to generate revenue could be delayed significantly.

Switching or adding additional CROs involves additional cost and requires management time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

We rely completely on third parties to manufacture our preclinical and clinical drug supplies and we intend to rely on third parties to produce commercial supplies of any approved product candidate.

If we were to experience an unexpected loss of supply of our product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat clinical trials and could also face delays with respect to any NDA submission or approval. We do not currently have nor do we plan to acquire the infrastructure or capability

internally to manufacture our preclinical and clinical drug supplies and we lack the resources and the capability to manufacture any of our product candidates on a clinical or commercial scale. The facilities used by our contract manufacturers or other third party manufacturers to manufacture our product candidates, including Patheon with respect to supplies of Zilretta, must be approved by the FDA. While we work closely with our third party manufacturers on the manufacturing process for our product candidates, including quality audits, we generally do not control the implementation of the manufacturing process of, and are completely dependent on, our contract manufacturers or other third party manufacturers for compliance with cGMP regulatory requirements and for manufacture of both active drug substances and finished drug products. If our contract manufacturers or other third party manufacturers cannot successfully manufacture material that conforms to applicable specifications and the strict regulatory requirements of the FDA or others, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities.

In addition, we have no control over the ability of our contract manufacturers or other third party manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved.

We are particularly reliant on Patheon with respect to maintaining Zilretta manufacturing suites and validating the Zilretta manufacturing process in those suites. These Patheon facilities will need to be approved by the FDA as a condition to any NDA approval for Zilretta, as we intend to rely exclusively on Patheon for initial commercial supply of Zilretta. In addition, because Patheon will be manufacturing Zilretta in the United Kingdom, or U.K., it will need to maintain and update its facility license with the applicable U.K. regulatory agencies and any delay or inability to do so would delay or prevent Patheon from being able to produce commercial supplies of Zilretta. Furthermore, the manufacturing process for Zilretta is unique and involves specialized equipment and proprietary processes, and Patheon has not previously manufactured Zilretta, which subjects us to heightened risks that Patheon will experience delays in validating the manufacturing process. If Patheon experiences such delays, particularly delays in producing Zilretta in compliance with cGMP regulations, the FDA may refuse to approve the NDA. In addition, due to the fact that all prior cGMP batches of Zilretta have been produced by Evonik, and any cGMP batches produced at Patheon's facilities have not completed longer-term stability testing, we will need to demonstrate that Zilretta produced at Patheon's facilities is comparable to Zilretta previously produced by Evonik. If we are unable to demonstrate such comparability to the satisfaction of the FDA, it may result in a deficiency in the NDA during the review and delay approval until such time that batches of Zilretta produced by Patheon have demonstrated sufficient stability.

We also rely on our manufacturers to purchase from third party suppliers the materials necessary to produce our product candidates for our clinical trials. There are a limited number of suppliers for raw materials that we use to manufacture our drugs and there may be a need to assess alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials, and if approved, for commercial sale. 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. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, any significant delay in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a contract manufacturer or other third party manufacturer could considerably delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates. If our manufacturers or we are unable to purchase these raw materials after regulatory approval has been obtained for our product candidates, the commercial launch of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenue from the sale of our product candidates.

We expect to continue to depend on contract manufacturers or other third party manufacturers for the foreseeable future. We have entered into long-term commercial supply agreements with our current contract manufacturers in order to maintain adequate supplies to manufacture finished drug product. We may, however, be unable to enter into such agreements or do so on commercially reasonable terms for potential future product candidates which could have a material adverse impact upon our business.

We rely on certain sole sources of supply for our product candidates and any disruption in the chain of supply may cause delay in developing, obtaining approval for, and commercializing our product candidates.

Currently, we use the following sole sources of supply for manufacturing Zilretta: Farmabios SpA for TA, Evonik Corporation for PLGA, and Patheon for finished microspheres drug product. Because of the unique equipment and process for loading TA onto PLGA microspheres, transferring finished drug product manufacturing activities for Zilretta to an alternate supplier would be a time-consuming and costly endeavor, and there are only a limited number of manufacturers that we believe are capable of performing this function for us. Switching Zilretta finished drug suppliers may involve substantial cost and could result in a delay in our desired clinical, regulatory and commercial timelines. For Zilretta, we expect that for the foreseeable future we will only seek to qualify Patheon as a commercial supplier with the FDA. As a result, if supply from Patheon is interrupted, there could be a significant disruption in commercial supply. Any alternative vendor would need to be qualified through an NDA supplement which could result in further delay. The FDA or other regulatory agencies outside of the United States may also require additional studies if a new Zilretta supplier is relied upon for commercial production.

These factors could cause the delay of clinical trials, regulatory submissions, required approvals or commercialization of Zilretta or any of our product candidates, cause us to incur higher costs and prevent us from commercializing them successfully. Furthermore, if our suppliers fail to deliver the required commercial quantities of active pharmaceutical ingredient on a timely basis and at commercially reasonable prices and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical trials may be delayed or we could lose potential revenue in the event of a product stockout if Zilretta or any other product candidate is approved and launched.

Our agreements with Patheon may expose us to unanticipated expenses and we may never realize an adequate return on our investment.

We and Patheon have entered into Manufacturing and Technical Transfer Agreements for the manufacture of Zilretta. Under the terms of the Technical Transfer Agreement, Patheon has agreed to undertake certain technical transfer activities and construction services needed to prepare its United Kingdom facility for the manufacture of Zilretta in dedicated manufacturing suites. We have agreed with Patheon, among other things, to provide the equipment necessary to manufacture Zilretta in these suites, to pay for construction of the suites, and to make payments related to their establishment and validation of manufacturing processes in the suites, and we expect these costs to be substantial.

Due to the complexity of the manufacture of Zilretta and the fact that Patheon had never previously manufactured Zilretta, the validation of the Zilretta manufacturing process in the Patheon suites may be subject to heightened risk of cost overruns and delays. If Patheon experiences unanticipated cost overruns, if Patheon experiences delays in validating the Zilretta manufacturing process, or if the Patheon suites do not receive regulatory approvals in the timeframe anticipated, if at all, this could have a material adverse effect on our business, financial position and results of operations. In particular, if we are unable to obtain regulatory approval for Zilretta or subsequent commercial supply of Zilretta from Patheon, we may not realize an appropriate return, or any return, on our significant investment in establishing and validating the Patheon manufacturing suites.

Manufacturing issues may arise that could increase product and regulatory approval costs or delay commercialization.

As we scale up manufacturing of our product candidates and conduct required stability testing, we may encounter product, packaging, equipment and process-related issues that may require refinement or resolution in order to proceed with our planned clinical trials and obtain regulatory approval for commercial marketing. In the future, we may identify impurities, which could result in increased scrutiny by regulatory authorities, delays in our clinical



program and regulatory approval, increases in our operating expenses, or failure to obtain or maintain approval for our product candidates.

We may not be successful in establishing development and commercialization collaborations which could adversely affect, and potentially prohibit, our ability to develop our product candidates.

Because developing pharmaceutical products, conducting clinical trials, obtaining regulatory approval, establishing manufacturing capabilities and marketing approved products are expensive, we are exploring collaborations with third parties outside of the United States that have more resources and experience. For example, we are exploring selective partnerships with third parties for Zilretta development and commercialization outside of the United States. If we are unable to obtain a partner for Zilretta, we may be unable to advance the development of Zilretta in territories outside of the United States, which may limit the market potential for this product candidate. In situations where we enter into a development and commercial collaboration arrangement for a product candidate, we may also seek to establish additional collaborations for development and commercialization in territories outside of those addressed by the first collaboration arrangement for such product candidate. If any of our product candidates receives marketing approval, we may enter into sales and marketing arrangements with third parties with respect to otherwise unlicensed or unaddressed territories outside of the United States. There are a limited number of potential partners, and we expect to face competition in seeking appropriate partners. If we are unable to enter into any development and commercial collaborations and/or sales and marketing arrangements on acceptable terms, if at all, we may be unable to successfully develop and seek regulatory approval for our product candidates and/or effectively market and sell future approved products, if any, in all of the territories outside of the United States where it may otherwise be valuable to do so.

We may not be successful in maintaining development and commercialization collaborations, and our partners may not devote sufficient resources to the development or commercialization of our product candidates or may otherwise fail in development or commercialization efforts, which could adversely affect our ability to develop certain of our product candidates and our financial condition and operating results.

Even if we are able to establish collaboration arrangements, any such collaboration may not ultimately be successful, which could have a negative impact on our business, results of operations, financial condition and growth prospects. If we partner with a third party for development and commercialization of a product candidate, we can expect to relinquish some or all of the control over the future success of that product candidate to the third party. It is possible that a partner may not devote sufficient resources to the development or commercialization of our product candidate or may otherwise fail in development or commercialization efforts, in which event the development and commercialization of such product candidate could be delayed or terminated and our business could be substantially harmed. In addition, the terms of any collaboration or other arrangement that we establish may not prove to be favorable to us or may not be perceived as favorable, which may negatively impact the trading price of our common stock. In some cases, we may be responsible for continuing development of a product candidate or research program under collaboration and the payment we receive from our partner may be insufficient to cover the cost of this development. Moreover, collaborations and sales and marketing arrangements are complex and time consuming to negotiate, document and implement and they may require substantial resources to maintain.

We may become subject to a number of additional risks associated with our dependence on collaborations with third parties, the occurrence of which could cause our collaboration arrangements to fail. Conflicts may arise between us and partners, such as conflicts concerning the interpretation of clinical data, the achievement of milestones, the interpretation of financial provisions or the ownership of intellectual property developed during the collaboration. If any such conflicts arise, a partner could act in its own self-interest, which may be adverse to our best interests. Any such disagreement between us and a partner could result in one or more of the following, each of which could delay or prevent the development or commercialization of our product candidates, and in turn prevent us from generating sufficient revenue to achieve or maintain profitability:

-

reductions in the payment of royalties or other payments we believe are due pursuant to the applicable collaboration arrangement;

actions taken by a partner inside or outside our collaboration which could negatively impact our rights or benefits under our collaboration; or

- unwillingness on the part of a partner to keep us informed regarding the progress of its development and commercialization activities or to permit public disclosure of the results of those activities.

### Risks Related to Commercialization of Our Product Candidates

Our commercial success depends upon attaining significant market acceptance of our product candidates, if approved, among physicians, healthcare payors, patients and the medical community.

Even if we obtain regulatory approval for Zilretta or any of our other potential future product candidates, the product may not gain market acceptance among physicians, healthcare payors, patients and the medical community, which is critical to commercial success. Market acceptance of any product candidate for which we receive approval depends on a number of factors, including:

- the efficacy and safety as demonstrated in clinical trials;
- the timing of market introduction of the product candidate as well as competitive products;
- the clinical indications for which the product candidate is approved;
- acceptance by physicians, the medical community and patients of the product candidate as a safe and effective treatment;
- the ability to distinguish safety and efficacy from existing, less expensive generic alternative therapies;
- the convenience of prescribing and initiating patients on the product candidate;
- the potential and perceived advantages of such product candidate over alternative treatments;
- the cost of treatment in relation to alternative treatments, including any similar generic treatments;
- the availability of coverage and adequate reimbursement and pricing by third-party payors and government authorities;
- relative convenience and ease of administration;
- the prevalence and severity of adverse side effects; and
- the effectiveness of sales and marketing efforts.

If our product candidates, including Zilretta, are approved but fail to achieve an adequate level of acceptance by physicians, healthcare payors, patients and the medical community, we will not be able to generate significant revenue, and we may not become or remain profitable.

Guidelines and recommendations published by various organizations can reduce the use of our product candidates.

Government agencies promulgate regulations and guidelines directly applicable to us and to our product candidates. In addition, professional societies, such as the American Academy of Orthopedic Surgeons, practice management groups, private health and science foundations and organizations involved in various diseases from time to time may also publish guidelines or recommendations to the healthcare and patient communities. Recommendations of government agencies or these other groups or organizations may relate to such matters as usage, dosage, route of administration and use of concomitant therapies. Recommendations or guidelines suggesting the reduced use of our product candidates or the use of competitive or alternative products as the standard of care to be followed by patients and healthcare providers could result in decreased use of our product candidates.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to market and sell our product candidates, we may be unable to generate any revenue.

Although we intend to establish a targeted sales and marketing organization to promote any approved products in the United States, we currently have no such organization or capabilities, and the cost of establishing and maintaining such an organization may exceed the cost-effectiveness of doing so. In order to market any products that may be approved, we must build sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services. We may enter into strategic partnerships with third parties to commercialize our product candidates outside of the United States.



To date, we have not entered into any strategic partnerships for any of our product candidates. We face significant competition in seeking appropriate strategic partners, and these strategic partnerships can be intricate and time consuming to negotiate and document. We may not be able to negotiate strategic partnerships for territories outside of the United States on acceptable terms, or at all. We are unable to predict when, if ever, we will enter into any strategic partnerships outside of the United States because of the numerous risks and uncertainties associated with establishing strategic partnerships. To the extent that we enter into collaboration arrangements, our future collaboration partners may not dedicate sufficient resources to the commercialization of our product candidates or may otherwise fail in their commercialization due to factors beyond our control. If we are unable to establish effective collaborations to enable the sale of our product candidates in territories outside of the United States, or if our potential future collaboration partners do not successfully commercialize our product candidates in these territories, our ability to generate revenue from product sales will be adversely affected.

If we are unable to negotiate a strategic partnership or obtain additional financial resources for a product candidate, we may be forced to curtail the development of such product candidate, delay potential commercialization, reduce the scope of our sales or marketing activities or undertake development or commercialization activities at our own expense. In addition, without a partnership, we will bear all the risk related to the development of the product candidate, including in territories outside of the United States. If we elect to increase our expenditures to fund development or commercialization activities ourselves, we will need to obtain additional capital, which may not be available to us on acceptable terms, or at all. If we do not have sufficient funds, we will not be able to bring Zilretta or any other product candidates to market or generate product revenue.

We and any collaboration partners that we may engage will be competing with many companies that currently have extensive and well-funded marketing and sales operations. If we, alone or with commercialization partners, are unable to compete successfully against these established companies, the commercial success of any approved products will be limited.

If we are unable to effectively train and equip our sales force, our ability to successfully commercialize Zilretta will be harmed.

Even if we establish a sales force, Zilretta, if approved, will be a newly-marketed drug and, therefore, none of the members of our sales force will have ever promoted Zilretta prior to its launch. As a result, we will be required to expend significant time and resources to train our sales force in marketing Zilretta. In addition, we must train our sales force to ensure that an appropriate and compliant message about Zilretta is being delivered. If we are unable to effectively train our sales force and equip them with compliant and effective materials, including medical and sales literature to help them appropriately inform and educate regarding the potential benefits of Zilretta and its proper administration, our efforts to successfully commercialize Zilretta could be put in jeopardy, which would negatively impact our ability to generate product revenues.

If we obtain approval to commercialize any approved products outside of the United States, a variety of risks associated with international operations could materially adversely affect our business.

If Zilretta or other product candidates are approved for commercialization, we may enter into agreements with third parties to market these products outside of the United States. We expect that we will be subject to additional risks related to entering into international business relationships, including:

- different regulatory requirements for drug approvals in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;

• compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;  
• foreign taxes, including withholding of payroll taxes;

42

---

- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incidental to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters, including earthquakes, typhoons, floods and fires.

If we are unable to differentiate Zilretta, from existing generic therapies for the treatment of OA, or if the FDA or other applicable regulatory authorities approve generic products that compete with Zilretta, the ability to successfully Zilretta would be adversely affected.

Immediate-release TA and other injectable immediate-release steroids, which are the current IA standard of care for OA pain, are available in generic form and are therefore relatively inexpensive compared to the price we would expect to receive for Zilretta. These generic steroids also have well-established market positions and familiarity with physicians, healthcare payors and patients. Although we believe Zilretta has the potential for clinically meaningful differentiation as compared to immediate-release TA based on our clinical trial data, it is possible that as we receive data from additional clinical trials, the data will not continue to support such differentiation. It is also possible that the FDA, physicians and healthcare payors will not agree with our interpretation of our existing and future clinical trial data for Zilretta. If we are unable to demonstrate significant differentiation for Zilretta from immediate-release TA and other injectable immediate-release steroids, our opportunity for Zilretta to achieve premium pricing and be commercialized successfully, if approved, would be adversely affected. For example, although Zilretta, compared to immediate-release TA, achieved statistical significance through 12 weeks in validated, OA specific pain, stiffness, function and quality of life secondary measures in our recently completed Phase 3 trial and showed numeric improvements at weeks 2 through 12 on the daily pain rating scale, it did not achieve statistical significance in the daily pain rating scale during the course of the trial. As a result, it is possible that healthcare payors will not agree with our assessment that Zilretta is sufficiently differentiated from immediate-release TA to support premium pricing for Zilretta.

In addition to existing generic steroids, such as immediate-release TA, the FDA or other applicable regulatory authorities may approve generic products that could compete with our product candidates. Once an NDA, including a Section 505(b)(2) application, is approved, the product covered thereby becomes a “listed drug” which can, in turn, be cited by potential competitors in support of approval of an abbreviated new drug application, or ANDA. The FDCA, FDA regulations and other applicable regulations and policies provide incentives to manufacturers to create modified, non-infringing versions of a drug to facilitate the approval of an ANDA or other application for generic substitutes. These manufacturers might only be required to conduct a relatively inexpensive study to show that their product has the same active ingredient(s), dosage form, strength, route of administration, conditions of use, or labeling as our product candidate and that the generic product is bioequivalent to ours, meaning it is absorbed in the body at the same rate and to the same extent as our product candidate. These generic equivalents, which must meet the same quality standards as branded pharmaceuticals, would be significantly less costly than ours to bring to market and companies that produce generic equivalents are generally able to offer their products at lower prices. Thus, after the introduction of a generic competitor, a significant percentage of the sales of any branded product is typically lost to the generic product. Accordingly, competition from generic equivalents to our product candidates would materially adversely impact our ability to successfully commercialize our product candidates.

We face significant competition from other biopharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industries are intensely competitive and subject to rapid and significant technological change. In addition, the competition in the pain and OA market is intense. We have competitors both in the United States and



internationally, including major multinational pharmaceutical companies, biotechnology companies and universities and other research institutions. For example, the injectable OA treatment market today includes many injectable immediate-release steroids, including TA, the active ingredient in Zilretta, as well as HA injections. In addition, we expect that injectable therapies such as Zilretta will continue to be used primarily after oral medications

no longer provide adequate pain relief. To the extent that new or improved oral pain medications are introduced that demonstrate better long-term efficacy and safety, patients and physicians may further delay the introduction of injectable therapies such as Zilretta in the OA treatment continuum. Zilretta could also face competition from other formulations or devices that deliver pain medication on an extended basis, such as transdermal delivery systems or implantable devices.

Many of our competitors have substantially greater financial, technical and other resources, such as larger research and development staffs and experienced commercial and manufacturing organizations. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated in our competitors. As a result, these companies may obtain regulatory approval more rapidly than we are able and may be more effective in selling and marketing their products as well. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies. Competition may increase further as a result of advances in the commercial applicability of technologies and greater availability of capital for investment in these industries. Our competitors may succeed in developing, acquiring or licensing on an exclusive basis drug products or drug delivery technologies that are more effective or less costly than Zilretta or any other drug candidate that we are currently developing or that we may develop.

We believe that our ability to successfully compete will depend on, among other things:

- the efficacy and safety of our product candidates, including as relative to marketed products and product candidates in development by third parties;
- the ability to distinguish safety and efficacy from existing, less expensive generic alternative therapies;
- the time it takes for our product candidates to complete clinical development and receive marketing approval;
  - the ability to maintain a good relationship with regulatory authorities;
- the ability to commercialize and market any of our product candidates that receive regulatory approval;
- the price of our products, including in comparison to branded or generic competitors;
- whether coverage and adequate levels of reimbursement are available under private and governmental health insurance plans, including Medicare;
- the ability to protect intellectual property rights related to our product candidates;
- the ability to manufacture on a cost-effective basis and sell commercial quantities of any of our product candidates that receive regulatory approval; and
- acceptance of any of our product candidates that receive regulatory approval by physicians and other healthcare providers.

If our competitors market products that are more effective, safer or less expensive than our future products, if any, or that reach the market sooner than our future products, if any, we may not achieve commercial success. In addition, the biopharmaceutical industry is characterized by rapid technological change. Because we have limited research and development capabilities, it may be difficult for us to stay abreast of the rapid changes in each technology. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical.

If we are unable to achieve and maintain adequate levels of third-party payor coverage and reimbursement for Zilretta or any other product candidates, if approved, on reasonable pricing terms, their commercial success may be severely hindered.

Successful sales of any approved product candidates depend on the availability of adequate coverage and reimbursement from third-party payors. Patients who are prescribed medicine for the treatment of their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs.



Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. Assuming we obtain coverage for a given product, the resulting reimbursement payment rates might not be adequate or may require co-payments that patients find unacceptably high.

Payors may require documented proof that patients meet certain eligibility criteria in order to be reimbursed for Zilretta, requiring that a patient first try and fail generic immediate-release TA. Payors may even require that pre-approval, or prior-authorization, be obtained from the payor for reimbursement of Zilretta. Patients are unlikely to use our products, including Zilretta, if approved, unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our products.

In addition, the market for Zilretta and any of our other product candidates will depend significantly on access to third-party payors' drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. The industry competition to be included in such formularies often leads to downward pricing pressures on pharmaceutical companies, and we will be required to offer discounted rates to state Medicaid programs to ensure Medicaid coverage of our drug. Also, third-party payors may refuse to include a particular branded drug in their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available.

Third-party payors, whether foreign or domestic, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. The U.S. government, state legislatures and foreign governments have shown significant interest in implementing cost-containment programs, including price controls, restrictions on reimbursement and requirements for substitution of generic products. In addition, in the United States, no uniform policy of coverage and reimbursement for drug products exists among third-party payors. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be obtained.

Further, we believe that future coverage and reimbursement will likely be subject to increased restrictions both in the United States and in international markets. Third party coverage and reimbursement for Zilretta or any of our other product candidates for which we may receive regulatory approval may not be available or adequate in either the United States or international markets, or may be more limited than the indications for which the drug is approved by the FDA or comparable foreign regulatory authorities. Moreover, eligibility for coverage and reimbursement does not imply that a drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. If coverage and reimbursement are not available or only available at limited levels, we may not be able to successfully commercialize any product candidate for which we obtain marketing approval, which could have a material adverse effect on our business, results of operations, financial condition and prospects.

Recently enacted and future legislation, including health care reform measures, may increase the difficulty and cost for us to commercialize our product candidates and may affect the prices we may obtain.

The United States and some foreign jurisdictions are considering, or have enacted, a number of legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our product candidates profitably, once they are approved for sale. Among policy makers and third-party payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been, and may continue to be, significantly affected by

major legislative, congressional and enforcement initiatives. Moreover, in some foreign jurisdictions, pricing of prescription pharmaceuticals is already subject to government control.

In March 2010, PPACA was enacted, which was intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add transparency

requirements for the healthcare and health insurance industries, impose taxes and fees on the health industry and impose additional health policy reforms. Among the PPACA provisions of importance to the pharmaceutical industry are the following:

- an annual, non-deductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs;
- an increase in the rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13% of the average manufacturer price for branded and generic drugs, respectively;
- a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts to negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- extension of manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the Federal Poverty Level, thereby potentially increasing manufacturers' Medicaid rebate liability;
- expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;
- new requirements under the federal Open Payments program, created under Section 6002 of PPACA, and its implementing regulations that manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report annually to CMS information related to "payments or other transfers of value" made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and that applicable manufacturers and applicable group purchasing organizations report annually to CMS ownership and investment interests held by physicians (as defined above) and their immediate family members, with data collection and reporting to CMS currently required by March 31<sup>st</sup>, of each calendar year;
- a requirement to annually report drug samples that manufacturers and distributors provide to physicians;
- expansion of healthcare fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for non-compliance;
- an FDA-approval framework for follow-on biologic products;
- a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research;
- creation of the Independent Payment Advisory Board, which, if impaneled, would have authority to recommend certain changes to the Medicare program that do not affect coverage or quality, which, among other things, could result in reduced payments for prescription drugs and those recommendations could have the effect of law even if Congress does not act on the recommendations; and
- establishment of a Center for Medicare & Medicaid Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of PPACA. In January, Congress voted to adopt a budget resolution for fiscal year 2017, or the Budget Resolution, that authorizes the implementation of legislation that would repeal portions of PPACA. The Budget Resolution is not a law,

however, it is widely viewed as the first step toward the passage of legislation that would repeal certain aspects of PPACA. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under PPACA to waive, defer, grant exemptions from, or delay the implementation of any provision of PPACA that would impose a fiscal or regulatory burden on states, individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. Congress also could consider subsequent legislation to replace elements of PPACA that are repealed.

We expect that PPACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and lower reimbursement, as well as additional downward pressure on the price that we receive for any approved product. There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices, including several recent U.S. Congressional inquiries and proposed bills designed to, among other things, increase drug pricing transparency, reduce the cost of drugs under Medicare, review relationships between pricing and manufacturer patient assistance programs, and reform government program drug reimbursement methodologies. Any reduction in reimbursement from Medicare, Medicaid or other government-funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our drugs. Additionally, we are currently unable to predict what additional legislation or regulation, if any, relating to the healthcare industry may be enacted in the future or what effect recently enacted federal legislation or any such additional legislation or regulation would have on our business.

#### Risks Related to Our Business Operations and Industry

Our future success depends on our ability to retain key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on the principal members of our executive team, the loss of whose services may adversely impact the achievement of our objectives. While we have entered into employment agreements or offer letters with each of our executive officers, any of them could leave our employment at any time, as all of our employees are “at will” employees. Recruiting and retaining other qualified employees for our business, including scientific and technical personnel, will also be critical to our success. There is currently a shortage of skilled executives in our industry, which is likely to continue. As a result, competition for skilled personnel is intense and the turnover rate can be high. We may not be able to attract and retain personnel on acceptable terms given the competition among numerous pharmaceutical companies for individuals with similar skill sets. In addition, failure to succeed in clinical studies may make it more challenging to recruit and retain qualified personnel. The inability to recruit or the loss of the services of any executive or key employee might impede the progress of our development and commercialization objectives.

We will need to expand our organization, and we may experience difficulties in managing this growth, which could disrupt our operations.

As of December 31, 2016, we had 95 full-time employees. As our company matures, we expect to expand our employee base to increase our managerial, scientific and engineering, operational, sales, marketing, financial and other resources and to hire more consultants and contractors. Future growth would impose significant additional responsibilities on our management, including the need to identify, recruit, maintain, motivate and integrate additional employees, consultants and contractors. Also, our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We also expect to hire significant additional personnel, including adding a sales and marketing organization. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Future growth could require significant capital expenditures

and may divert financial resources from other projects, such as the development of our existing or future product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenue could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize Zilretta and



our other product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage any future growth.

We face potential product liability, and, if successful claims are brought against us, we may incur substantial liability.

The use of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare providers, pharmaceutical companies or others selling or otherwise coming into contact with our product candidates. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation;
- withdrawal of clinical trial participants;
- costs due to related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- the inability to commercialize our product candidates; and
- decreased demand for our product candidates, if approved for commercial sale.

Our current product liability insurance coverage may not be sufficient to reimburse us for any expenses or losses we may suffer. Moreover, insurance coverage is becoming increasingly expensive and in the future we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses due to liability. If and when we obtain marketing approval for Zilretta or any of our other product candidates, we intend to expand our insurance coverage to include the sale of commercial products; however, we may be unable to obtain such product liability insurance on commercially reasonable terms or in adequate amounts. On occasion, large judgments have been awarded in class action lawsuits based on drugs that had unanticipated adverse effects. A successful product liability claim or series of claims brought against us could cause our stock price to decline and, if judgments exceed our insurance coverage, could adversely affect our results of operations and business.

We rely significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology, including any cybersecurity incidents, could harm our ability to operate our business effectively.

Despite the implementation of security measures, our internal computer systems and those of third parties with which we contract are vulnerable to damage from cyber-attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. System failures, accidents or security breaches could cause interruptions in our operations, and could result in a material disruption of our clinical activities and business operations, in addition to possibly requiring substantial expenditures of resources to remedy. The loss of clinical trial data could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability and our development programs and the development of our product candidates could be delayed.

Business interruptions could delay us in the process of developing our product candidates and could disrupt our sales.

Our headquarters are located in Burlington, Massachusetts. We are vulnerable to natural disasters such as hurricanes, tornadoes and severe storms, as well as other events that could disrupt our operations. We do not carry insurance for natural disasters and we may not carry sufficient business interruption insurance to compensate us for losses that may occur. Any losses or damages we incur could have a material adverse effect on our business operations.



## Risks Related to Our Intellectual Property

If we are unable to obtain or protect intellectual property rights related to our product candidates, we may not be able to compete effectively in our market.

We rely upon a combination of patents, trade secret protection, confidentiality agreements and proprietary know how, and intend to seek marketing exclusivity for any approved product, in order to protect the intellectual property related to product candidates, and to date we have only one issued patent covering Zilretta. The strength of patents in the biotechnology and pharmaceutical field involves complex legal and scientific questions and can be uncertain. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our product candidates in the United States or in other foreign countries. If this were to occur, early generic competition could be expected against Zilretta and potentially our other product candidates in development. Even if patents do successfully issue, third parties may challenge their validity, enforceability or scope, which may result in such patents being narrowed or invalidated. Also, a third party may challenge our ownership of patents and patent applications assigned to us, or may challenge our exclusive rights to patents and patent applications that we license from third parties. Furthermore, even if they are unchallenged, our patents and patent applications may not adequately protect our intellectual property or prevent others from designing around our claims. If the additional patent applications we hold with respect to Zilretta or our other product candidates fail to issue or if their breadth or strength of protection is threatened, it could dissuade companies from collaborating with us to develop them and threaten our ability to commercialize any resulting products. We cannot offer any assurances about which, if any, patents will issue or whether any issued patents will not be found invalid and unenforceable or will go unthreatened by third parties. Further, if we encounter delays in regulatory approvals, the period of time during which we could market Zilretta or any other product candidate under patent protection could be reduced. Furthermore, patent applications by third parties can result in an interference proceeding in the United States being provoked by a third party or instituted by us to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. See “Business—Patents and Patent Applications” for additional information regarding our material patents and patent applications.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect proprietary know-how that is not patentable, processes for which patents are difficult to enforce and any other elements of our drug development process that involve proprietary know-how, information or technology that is not covered by patents. For example, we maintain trade secrets with respect to certain of the formulation and manufacturing techniques related to the TA-formulated PLGA microspheres in Zilretta, including those that relate to precise pharmaceutical release. Although we generally require all of our employees to assign their inventions to us, and all of our employees, consultants, advisors and any third parties who have access to our proprietary know-how, information or technology to enter into confidentiality agreements, we cannot provide any assurances that all such agreements have been duly executed or that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Further, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent material disclosure of the non-patented intellectual property related to our technologies to third parties, and there is no guarantee that we will have any such enforceable trade secret protection, we may not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, results of operations and financial condition.

Third party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and inter party reexamination proceedings before the U.S. PTO. 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 collaborators are developing product candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties.

Third parties may assert that we are employing their proprietary technology without authorization. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of Zilretta and/or our other product candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of any of our product candidates, any drug substance formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtain a license under the applicable patents, or until such patents expire. Similarly, if any third party patent were held by a court of competent jurisdiction to cover aspects of our formulations or methods of use, the holders of any such patent may be able to block our ability to develop and commercialize the applicable product candidate unless we obtain a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all.

Parties making claims against us may request and/or obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties or redesign our infringing products or manufacturing processes, which may be impossible or require substantial time and monetary expenditure. We cannot predict whether any such license would be available at all or whether it would be available on commercially reasonable terms. Furthermore, even in the absence of litigation, we may need to obtain licenses from third parties to advance our research, manufacture clinical trial supplies or allow commercialization of our product candidates. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. In that event, we would be unable to further develop and commercialize one or more of our product candidates, which could harm our business significantly. We cannot provide any assurances that third party patents do not exist which might be enforced against our products, resulting in either an injunction prohibiting our sales, or, with respect to our sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties.

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

Competitors may infringe our patents or the patents of our licensors. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in an infringement proceeding, a court may decide that a patent of ours or our licensors is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

Interference proceedings provoked by third parties or brought by us may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our collaborators or licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of litigation or interference proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. We may not be able to prevent, alone or with our licensors, misappropriation of our intellectual property rights, particularly in countries where the laws may not protect those rights as fully as in the United States.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the U.S. PTO and foreign patent agencies in several stages over the lifetime of the patent. The U.S. PTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors that control the prosecution and maintenance of our licensed patents fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have a material adverse effect on our business.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties.

We employ individuals who were previously employed at other biotechnology or pharmaceutical companies. We may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed confidential information of our employees' former employers or other third parties. We may also be subject to claims that former employers or other third parties have an ownership interest in our patents. Litigation may be necessary to defend against these claims. There is no guarantee of success in defending these claims, and if we are successful, litigation could result in substantial cost and be a distraction to our management and other employees.

#### Risks Related to Ownership of Our Common Stock

The market price of our common stock may be highly volatile, you may not be able to resell your shares at a desired market price and you could lose all or part of your investment.

The trading price of our common stock is likely to be volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

- adverse results or delays in clinical trials;
- inability to obtain additional funding;
- any adverse development or perceived adverse development with respect to the FDA's review of the Zilretta NDA;
- failure to successfully develop and commercialize our product candidates;
- changes in laws or regulations applicable to our product candidates;
- inability to obtain adequate product supply for our product candidates, or the inability to do so at acceptable prices;
- adverse regulatory decisions;
- introduction of new products or technologies by our competitors;
- failure to meet or exceed product development or financial projections we provide to the public;
- failure to meet or exceed the estimates and projections of the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;

- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of key scientific or management personnel;
- significant lawsuits, including patent or stockholder litigation;
- changes in the market valuations of similar companies;
- sales of our common stock by us or our stockholders in the future; and
- trading volume of our common stock.

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

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

As of December 31, 2016, our executive officers, directors and stockholders affiliated with our officers and directors beneficially owned approximately 17.1% of our voting stock. Therefore, these stockholders may have the ability to influence us through this ownership position. These stockholders may be able to determine or significantly influence all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control or significantly influence elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may believe are in your best interest as one of our stockholders.

We are an “emerging growth company,” and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startup Act, or JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies,” including exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a non-binding advisory vote on executive compensation. We will remain an emerging growth company until the earlier of (a) the last day of the fiscal year in which we have total annual gross revenue of at least \$1 billion, (b) December 31, 2019, (c) the date on which we are deemed to be a large accelerated filer, which would occur at the beginning of a year if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (d) the date on which we have issued more than \$1 billion in non-convertible debt during the prior three-year period.

Even after we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company” which would allow us to take advantage of many of the same exemptions from disclosure requirements including exemption from compliance with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.



Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have irrevocably elected not to avail

ourselves of this exemption from new or revised accounting standards and, therefore, will be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404 of the Sarbanes-Oxley Act, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our consolidated financial statements or identify other areas for further attention or improvement. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

We will continue to incur significant increased costs as a result of operating as a public company, and our management is required to devote substantial time to new compliance initiatives.

We completed our initial public offering on February 18, 2014. As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company. For example, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, which require, among other things, that we file with the SEC annually, quarterly and current reports with respect to our business and financial condition. We have incurred and will continue to incur costs associated with the preparation and filing of these reports. In addition, the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC, and the Nasdaq Global Market have imposed various other requirements on public companies. In July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as “say on pay” and proxy access. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact (in ways we cannot currently anticipate) the manner in which we operate our business. Our management and other personnel devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations have and will continue to increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, these rules and regulations have made it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain our current levels of such coverage.

Sales of a substantial number of shares of our common stock in the public market by our existing stockholders could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur, could depress the market price of our common stock and could impair our ability to raise capital through the sale of additional equity and/or convertible debt securities. We are unable to predict the effect that sales may have on the prevailing market price of our common stock.

Certain holders of our securities are entitled to rights with respect to the registration of their shares under the Securities Act of 1933, as amended, or the Securities Act. Registration of these shares under the Securities Act would

result in the shares becoming freely tradable without restriction under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

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

We expect that significant additional capital will be needed in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities; our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Pursuant to the 2013 plan, our management is authorized to grant stock options and other equity-based awards to our employees, directors and consultants. The number of shares available for future grant under the 2013 plan will automatically increase each year by 4% of all shares of our capital stock outstanding as of December 31 of the prior calendar year, subject to the ability of our board of directors to take action to reduce the size of the increase in any given year. Currently, we plan to register the increased number of shares available for issuance under the 2013 plan each year. If our board of directors elects to increase the number of shares available for future grant by the maximum amount each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

Section 382 of the Internal Revenue Code of 1986, as amended, or Section 382, contains rules that limit the ability of a company that undergoes an ownership change to utilize its net operating losses, or NOLs, and tax credits existing as of the date of such ownership change. Under the rules, such an ownership change is generally any change in ownership of more than 50% of a company's stock within a rolling three-year period. The rules generally operate by focusing on changes in ownership among stockholders considered by the rules as owning, directly or indirectly, 5% or more of the stock of a company and any change in ownership arising from new issuances of stock by the company. During the quarter ended June 30, 2014, we completed a Section 382 study through February 11, 2014. The results of this study showed that as of February 11, 2014, one historical ownership change within the meaning of Section 382 had occurred in 2009. As a result of this Section 382 limitation, approximately \$0.3 million of NOLs will expire unutilized. In addition, we completed another Section 382 study through December 31, 2014. The results of this study showed that we experienced an ownership change in 2014 as part of the follow-on offering, however, none of the NOLs will expire due to the Section 382 limitation associated with the ownership change, assuming sufficient future taxable income and no future limitations. Subsequent ownership changes as defined by Section 382 may further limit the amount of NOL carryforwards that could be utilized annually to offset future taxable income.

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

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Additionally, our credit and security agreement with MidCap

and Silicon Valley Bank contains covenants that restrict our ability to pay dividends. Any return to stockholders will therefore be limited to the appreciation of their stock.

Provisions in our amended and restated certificate of incorporation and bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders, and may prevent or frustrate attempts by our stockholders to replace or remove our current management.

Some provisions of our charter documents and Delaware law may have anti-takeover effects that could discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders, and may prevent attempts by our stockholders to replace or remove our current management. These provisions include:

- authorizing the issuance of “blank check” preferred stock, the terms of which may be established and shares of which may be issued without stockholder approval;
- limiting the removal of directors by the stockholders;
- creating a staggered board of directors;
- prohibiting stockholder action by written consent, thereby requiring all stockholder actions to be taken at a meeting of our stockholders;
- eliminating the ability of stockholders to call a special meeting of stockholders; and
- establishing advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, we are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with an interested stockholder of such corporation for a period of three years following the date on which the stockholder became an interested stockholder, unless such transactions are approved by our board of directors. This provision could have the effect of delaying or preventing a change of control, whether or not it is desired by or beneficial to our stockholders. Further, other provisions of Delaware law may also discourage, delay or prevent someone from acquiring us or merging with us.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

Our offices are located in Burlington, MA at a leased facility used primarily for corporate functions. Due to increased headcount and future growth plans, during 2015, the Company amended the original lease to expand the facility from 11,754 square feet to approximately 22,000 square feet. Our lease expires in October 2019.

Item 3. Legal Proceedings

We are not currently a party to any material legal proceedings.

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

Our common stock began trading on the Nasdaq Global Market on February 12, 2014 and trades under the symbol "FLXN". Prior to February 12, 2014, there was no public market for our common stock. The following table sets forth the high and low sales prices per share of our common stock as reported on The NASDAQ Global Market for the periods indicated.

Year Ended December 31, 2016	High	Low
First Quarter	\$19.42	\$7.56
Second Quarter	\$17.87	\$8.16
Third Quarter	\$19.63	\$14.78
Fourth Quarter	\$23.57	\$15.93
Year Ended December 31, 2015	High	Low
First Quarter	\$30.37	\$19.08
Second Quarter	\$23.70	\$15.50
Third Quarter	\$29.09	\$13.71
Fourth Quarter	\$21.71	\$13.08

On March 2, 2017, the last reported sale price of our common stock was \$20.88.

#### Comparative Stock Performance Graph

The following performance graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act or Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.

The following graph shows a comparison from February 12, 2014 (the date our common stock commenced trading on The NASDAQ Global Market) through December 31, 2016 of the cumulative total return for our common stock, the Russell 2000 Growth and Biotech index and the NASDAQ Composite Index (CCMP). The graph assumes an initial investment of \$100 on February 12, 2014. The comparisons in the graph are not intended to forecast or be indicative of possible future performance of our common stock.

#### Holders of Record

As of March 2, 2017, there were approximately 25 stockholders of record of our common stock. Certain shares are held in “street” name and accordingly, the number of beneficial owners of such shares is not known or included in the foregoing number.

#### Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. We do not intend to pay cash dividends on our common stock for the foreseeable future. In addition, pursuant to our credit and security agreement with MidCap and Silicon Valley Bank, we are prohibited from paying cash dividends without the prior consent of MidCap and Silicon Valley Bank. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

#### Securities Authorized for Issuance under Equity Compensation Plans

Information about our equity compensation plans is incorporated herein by reference to Item 12 of Part III of this Annual Report.



## Item 6. Selected Financial Data

The following selected financial data should be read together with “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included elsewhere in this Annual Report. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements and the related notes. Our historical results are not necessarily indicative of the results that may be expected in the future and results of interim periods are not necessarily indicative of the results for the entire year.

We have derived the consolidated statements of operations data for the years ended December 31, 2016, 2015 and 2014 and the consolidated balance sheet data as of December 31, 2016 and December 31, 2015 from our audited consolidated financial statements appearing elsewhere in this Annual Report. The selected consolidated statement of operations data for the years ended December 31, 2013 and 2012 and the selected consolidated balance sheet data as of December 31, 2014, 2013 and 2012 are derived from our audited consolidated financial statements not included in this document. The selected consolidated financial data for all periods presented reflects the 1-for-8.13 reverse stock split we effected on January 27, 2014.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands)				
Consolidated Statement of Operations Data:					
Revenue	\$—	\$—	\$—	\$—	\$—
Operating expenses:					
Research and development	41,314	32,691	17,923	11,061	11,065
General and administrative	28,466	13,372	9,064	6,704	3,947
Total operating expenses	69,780	46,063	26,987	17,765	15,012
Loss from operations	(69,780)	(46,063)	(26,987)	(17,765)	(15,012)
Other income (expense):					
Interest income	1,521	1,246	479	234	194
Interest expense	(1,748 )	(571 )	(401 )	(449 )	—
Other income (expense), net	(1,887 )	(927 )	(404 )	(207 )	(164 )
Total other income (expense)	(2,114 )	(252 )	(326 )	(422 )	30
Net loss	\$(71,894)	\$(46,315)	\$(27,313)	\$(18,187)	\$(14,982)
Net loss per share attributable to common					
stockholders, basic and diluted <sup>(1)</sup>	\$(2.84 )	\$(2.15 )	\$(1.97 )	\$(23.02 )	\$(27.58 )
Weighted average common shares outstanding,					
basic and diluted <sup>(1)</sup>	25,297	21,497	13,894	790	543
	2016	2015	2014	2013	2012
Consolidated Balance Sheet Data:					
Cash, cash equivalents, marketable securities, and					
long-term investments	\$210,329	\$118,604	\$151,625	\$16,438	\$29,383
Working capital <sup>(2)</sup>	191,853	104,044	145,328	11,583	27,147
Total assets	226,262	127,139	153,348	18,731	30,008

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Total debt <sup>(3)</sup>	30,533	15,002	3,564	5,002	—
Convertible preferred stock	—	—	—	74,806	74,806
Total stockholders' equity (deficit)	187,032	103,986	144,942	(64,704)	(47,523)

- (1) See Note 3 to our consolidated financial statements appearing elsewhere in this Annual Report for further details on the calculation of basic and diluted net loss per share attributable to common stockholders.
- (2) We define working capital as current assets less current liabilities.
- (3) Total debt includes the current and long-term portion of our debt net of debt issuance costs. In April 2015, the FASB issued ASU 2015-03, Interest—Imputation of Interest, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of the related debt liability. The Company elected to early adopt this standard in the year ended December 31, 2016 which requires retrospective application and represents a change in accounting principle.

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

The following discussion and analysis of financial condition and results of operations should be read in conjunction with "Item 6. Selected Financial Data" and our consolidated financial statements and related notes appearing elsewhere in this Annual Report. This discussion and analysis and other parts of this Annual Report contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth under "Item 1A. Risk Factors". You should carefully read the "Risk Factors" section of this Annual Report to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section entitled "Special Note Regarding Forward-Looking Statements."

### Overview

We are a specialty pharmaceutical company focused on the development and commercialization of novel, local therapies for the treatment of patients with musculoskeletal conditions, beginning with osteoarthritis, a type of degenerative arthritis, referred to as OA. Our lead product candidate addresses the OA pain treatment spectrum, from moderate to severe pain, and provides us with a unique opportunity to achieve our goal of commercializing novel, patient-focused therapies.

We were incorporated in Delaware in November 2007, and to date we have devoted substantially all of our resources to our development efforts relating to our product candidates, including conducting clinical trials with our product candidates, providing general and administrative support for these operations and protecting our intellectual property. We do not have any products approved for sale and have not generated any revenue from product sales. From our inception through December 31, 2016, we have funded our operations primarily through the sale of our common stock and convertible preferred stock and, to a lesser extent, debt financing. From our inception through December 31, 2016, we have raised \$422.3 million from such transactions, including from our initial and follow-on public offerings. Until such time, if ever, when we can generate substantial product revenue, we expect to finance our cash needs through a combination of equity offerings, debt or other financings, government or third-party funding, and licensing or collaboration arrangements.

We have incurred net losses in each year since our inception in 2007. Our net losses were \$71.9 million, \$46.3 million, and \$27.3 million for the years ended December 31, 2016, 2015 and 2014, respectively. As of December 31, 2016, we had an accumulated deficit of \$211.7 million. Substantially all of our net losses resulted from costs incurred in connection with our development programs and from general and administrative expenses associated with our operations.

We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. We anticipate that our expenses will increase substantially in connection with our ongoing activities, as we:

- continue the development of our lead product candidate, Zilretta, including our on-going and future clinical trials;
- seek to obtain regulatory approvals for Zilretta;
- continue to scale-up manufacturing activities including the supply of clinical trial materials and registration and commercial batches;
- prepare for the potential launch and commercialization of Zilretta, if approved;
- establish a sales and marketing infrastructure for the commercialization of Zilretta, if approved;
- expand our development activities and advance additional product candidates;
- maintain, expand and protect our intellectual property portfolio; and
-

add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts and operations as a public company.

59

---

We do not expect to generate revenue from product sales unless and until we successfully complete development and obtain marketing approval for Zilretta or one of our other product candidates, which is subject to significant uncertainty. We anticipate that we will need to raise additional capital for the launch of Zilretta and completing clinical development of any of our other product candidates. Until such time that we can generate substantial revenue from product sales, if ever, we expect to finance our operating activities through a combination of equity offerings, debt or other financings, including convertible debt financings, government or other third-party funding and collaborations, and licensing arrangements. However, we may be unable to raise additional funds or enter into such arrangements when needed on favorable terms, or at all, which would have a negative impact on our financial condition and could force us to delay, limit, reduce or terminate our development programs or commercialization efforts or grant to others, rights to develop or market product candidates that we would otherwise prefer to develop and market ourselves. Failure to receive additional funding could cause us to cease operations, in part or in full.

## Financial Overview

### Revenue

We have not generated any revenue since our inception. We do not have any products approved for sale, and we do not expect to generate any revenue from the sale of products in the near future. In the future, if our research and development efforts result in clinical success and regulatory approval, we may generate revenue from the sales of our product candidates, including Zilretta, or we may generate revenue from licensing rights to our product candidates to third parties. If we fail to complete the development of Zilretta or our other product candidates, our ability to generate future revenue, and our results of operations and financial position will be adversely affected.

### Operating Expenses

The majority of our operating expenses to date have been related the development activities of Zilretta, and to a lesser extent FX007 and FX005.

### Research and Development Expenses.

Since our inception, we have focused our resources on our development activities, including: preclinical studies, clinical trials and chemistry manufacturing and controls, or CMC. Our development expenses consist primarily of:

- expenses incurred under agreements with consultants, contract research organizations, or CROs, and investigative sites that conduct our preclinical studies and clinical trials;
- costs of acquiring, developing and manufacturing clinical trial materials;
- personnel costs, including salaries, benefits, stock-based compensation and travel expenses for employees engaged in scientific research and development functions;
- costs related to compliance with regulatory requirements;
- expenses related to the in-license of certain technologies from pharmaceutical companies; and
- allocated expenses for rent and maintenance of facilities, insurance and other general overhead.

We expense research and development costs as incurred. Our direct research and development expenses consist primarily of external-based costs, such as fees paid to investigators, consultants, investigative sites, CROs and companies that manufacture our clinical trial materials and potential future commercial supplies, and are tracked on a program-by-program basis. We do not allocate personnel costs, facilities or other indirect expenses to specific research and development programs. These indirect expenses are included within the amounts designated as “Personnel and other costs” in the table below.



The following table summarizes our research and development expenses for the periods presented:

(In thousands)	Year Ended		
	December 31, 2016	2015	2014
Direct research and development expenses by program:			
Zilretta	\$24,609	\$22,046	\$11,627
FX007	349	669	738
FX005	13	247	211
Portfolio expansion	234	—	—
Other	620	—	—
Total direct research and development expenses	25,825	22,962	12,576
Personnel and other costs	15,489	9,729	5,347
Total research and development expenses	\$41,314	\$32,691	\$17,923

The Company previously performed research and development for the U.S. Department of Defense under a cost reimbursable grant for a Phase 2 clinical trial investigating Zilretta in active military and medically retired veterans with post-traumatic knee OA. Due to the challenges of enrolling military personnel with post-traumatic knee OA, the Company discontinued the trial and terminated the grant. Related costs incurred under the grant from the U.S. Department of Defense are included in research and development expenses. We are reimbursed and offset research and development expenses when invoices for allowable costs are prepared and submitted to the U.S. Department of Defense. Payments under cost reimbursable grants with agencies of the U.S. government are provisional payments subject to adjustment upon audit by the U.S. government. When the final determination of the allowable costs for any year has been made, research and development expenses may be adjusted accordingly. The grant also provides the U.S. government agency the ability to terminate the grant for various reasons, including if we fail to meet our obligations as set forth in the grant.

Our research and development expenses are expected to increase in the foreseeable future. Specifically, our costs associated with Zilretta will increase as we conduct additional clinical trials, further the manufacturing process in anticipation of validation and commercialization, including the costs for the build-out of the portion of the dedicated manufacturing facility with our contract manufacturer, Patheon UK Limited, or Patheon, make initial investments for commercial product supply, and otherwise advance our Zilretta development program. Evonik Corporation, or Evonik, is our supplier of PLGA and has manufactured drug product for our Zilretta clinical trial materials, however we currently use Patheon as our sole supplier of future Zilretta drug product for clinical trials and commercial supply. To that end, we will incur wind down costs with the technology transfer from Evonik to Patheon but are currently unable to estimate those costs. In addition, we are currently conducting a future use and impairment analysis of approximately \$2.4 million in manufacturing equipment located at the Evonik facility. We cannot determine with certainty the duration of and completion costs associated with future clinical trials of Zilretta. The duration, costs and timing associated with the development and commercialization of Zilretta and our other product candidates will depend on a variety of factors, including uncertainties associated with the results of our clinical trials and our ability to obtain regulatory approval. As a result of these uncertainties, we are currently unable to estimate with any precision our future research and development expenses for any product candidate, when or if we will achieve regulatory approval, generate revenue from sales of any product candidate or achieve a positive cash flow position.

General and Administrative Expenses.

General and administrative expenses consist primarily of personnel costs, including salaries, related benefits, travel expenses and stock-based compensation of our executive, finance, business development, commercial, information technology, legal and human resources functions. Other general and administrative expenses include an allocation of facility-related costs, patent filing expenses, and professional fees for legal, consulting, auditing and tax services.

We anticipate that our general and administrative expenses will increase in the future as we continue to build our corporate and commercial infrastructure to support the continued development and potential launch of Zilretta or



any of our other product candidates. Additionally, we anticipate increased expenses related to the audit, legal and compliance, regulatory, investor relations and tax-related services associated with maintaining compliance with the Securities and Exchange Commission Nasdaq requirements and healthcare laws and compliance requirements, director and officer insurance premiums and other costs associated with operating as a publicly-traded company.

#### Other Income (Expense)

Interest income. Interest income consists of interest earned on our cash, cash equivalents, marketable securities, and long-term investments balances. The primary objective of our investment policy is capital preservation.

Interest expense. In January 2013, we borrowed \$5.0 million under a credit facility with MidCap Financial SBIC, LP, or MidCap, and began to incur interest related to this borrowing at a fixed rate of 8% per annum. In March 2015, we paid MidCap \$3,236,019 to satisfy our obligation related to the credit facility.

In August 2015, we borrowed \$15.0 million under a credit facility with MidCap Funding XIII Trust and Silicon Valley Bank, and began to incur interest related to this borrowing at a fixed rate of 6.25% per annum. In July 2016, we borrowed the remaining \$15.0 million under the credit and security agreement, in the form of a second term loan receiving positive Zilretta clinical trial data meeting the trial's primary endpoint and which was sufficient to file an NDA for Zilretta. The second term loan is subject to the same credit terms as the initial term loan under facility. We expect to incur future interest expense related to this borrowing until February 1, 2020. See "Liquidity and Capital Resources" for a more detailed description of our credit facility.

Other expense. Other expense consists of the net amortization and accretion of premiums and discounts related to our marketable securities, and our realized gains (losses) on redemptions of our marketable securities. We will continue to incur expenses related to net amortization of premiums on marketable securities for as long as we hold these investments.

#### Income Taxes

As of December 31, 2016, we had \$95.3 million and \$89.0 million of federal and state net operating loss carryforwards, respectively, and \$5.2 million and \$2.8 million of federal and state research and development tax credit carryforwards, respectively, available to offset our future taxable income, if any. These federal net operating loss carryforwards and research and development tax credit carryforwards expire at various dates beginning in 2029, if not utilized and are subject to review and possible adjustment by the Internal Revenue Service. The state net operating loss carryforwards and research and development tax credit carryforwards expire at various dates beginning in 2030 and 2025, respectively, if not utilized and are subject to review and possible adjustment by the state tax authorities. At December 31, 2016, a full valuation allowance was recorded against our net operating loss carryforwards and our research and development tax credit carryforwards.

If we experience a greater than 50% aggregate change in ownership of certain stockholders over a three-year period, utilization of our then-existing net operating loss carryforwards and research and development tax credit carryforwards will be subject to an annual limitation.

#### Critical Accounting Policies and Significant Judgments and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our financial statements, which we have prepared in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of our

financial statements, and the reported revenue and expenses during the reported periods. We evaluate these estimates and judgments, including those described below, on an ongoing basis. We base our estimates on historical experience, known trends and events, contractual milestones and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying

value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 3 to our consolidated financial statements appearing elsewhere in this Form 10-K, we believe that the estimates and assumptions involved in the following accounting policies may have the greatest potential impact on our financial statements and, therefore, consider these to be critical for fully understanding and evaluating our financial condition and results of operations.

#### Research and Development Costs

As part of the process of preparing our financial statements, we are required to estimate our accrued and third-party prepaid research and development expenses. We base our accrued expenses related to clinical trials on estimates of patient enrollment and related expenses at clinical investigator sites, as well as estimates for services received and efforts expended pursuant to contracts with multiple research institutions and CROs that conduct and manage clinical trials on our behalf. We review new and open contracts and communicate with applicable internal and vendor personnel to identify services that have been performed on our behalf and estimate the level of service performed and the associated costs incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost for accrued expenses. The majority of our service providers invoice us monthly in arrears for services performed; however, some require advanced payments. For any services that require such advanced payments, we perform a review, with applicable internal and vendor personnel, to estimate the level of services that have been performed and the associated costs that have been incurred at each reporting period. We accrue expenses related to clinical trials based on contractual amounts applied to the level of patient enrollment and activity according to the protocol. We make estimates of our accrued and prepaid expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us. If timelines or contracts are modified based upon changes in the clinical trial protocol or scope of work to be performed, we modify our estimates of accrued expenses accordingly on a prospective basis. If we do not identify costs that we have begun to incur, or if we underestimate or overestimate the level of services performed or the costs of these services, our actual expenses could differ from our estimates. To date, we have not adjusted our estimates at any particular balance sheet date in any material amount.

#### Stock-Based Compensation

We measure stock-based awards granted to employees and directors at fair value on the date of the grant and recognize the corresponding compensation expense for those awards, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award, using the straight-line method. We measure stock-based awards granted to non-employees for services received based on the fair value of the equity instrument issued. The measurement date of the fair value of the equity instrument issued to non-employees is the earlier of the date on which the counterparty's performance is complete or the date on which there is a commitment to perform.

The fair value of each stock-based award granted is estimated using the Black-Scholes option-pricing model. Until February 11, 2014, we were a private company and we lacked company-specific historical and implied volatility information. Therefore, we estimated our expected stock volatility based on the historical volatility of our publicly-traded peer companies for periods that are commensurate with the expected term (in years) of our stock-based awards, and we expect to continue to do so until such time as we have adequate historical data regarding the volatility of our traded stock price. The expected term of our stock options has been determined utilizing the “simplified” method for awards that qualify as “plain vanilla” options. The expected term of stock options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that we have never paid cash dividends and do not expect to pay any cash dividends in the foreseeable future. The assumptions used to determine the fair value of stock-based awards using the Black-Scholes option-pricing model were as follows:

	Year Ended December 31,		
	2016	2015	2014
Risk-free interest rate	0.74-2.32%	1.92%	1.54-2.04%
Dividend yield	0 %	0 %	0 %
Expected term (in years)	5.6	6.0	6.0
Expected volatility	67.3-99.7%	64-83.9%	61.9-68.0%

We recognize compensation expense only for the portion of awards that are expected to vest. In developing a forfeiture rate estimate, we have considered our historical experience to estimate pre-vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from our estimate, we may be required to record adjustments to stock-based compensation expense in future periods. These assumptions represent our best estimates, but involve inherent uncertainties and the application of our judgment. As a result, if factors change and we use significantly different assumptions or estimates, our stock-based compensation expense could be materially different.

## RESULTS OF OPERATIONS

### Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

The following table summarizes our results of operations for the years ended December 31, 2016 and 2015:

	Year Ended December 31,			% Increase/	
(In thousands)	2016	2015	Change	(Decrease)	
Revenue	\$—	\$—	\$—	—	
Operating expenses:					
Research and development	41,314	32,691	8,623	26.4	%
General and administrative	28,466	13,372	15,094	112.9	%
Total operating expenses	69,780	46,063	23,717	51.5	%
Loss from operations	(69,780)	(46,063)	(23,717)	51.5	%

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Other income (expense):					
Interest income	1,521	1,246	275	22.0	%
Interest expense	(1,748 )	(571 )	(1,177 )	206.1	%
Other expense	(1,887 )	(927 )	(960 )	103.6	%
Total other income (expense)	(2,114 )	(252 )	(1,862 )	738.9	%
Net loss	\$(71,894)	(46,315)	\$(25,579)	55.2	%

## Research and Development Expenses

	Year Ended December 31,				% Increase/
(In thousands)	2016	2015	Change	(Decrease)	
Direct research and development expenses by program:					
Zilretta	\$24,609	\$22,046	\$2,563	11.6	%
FX007	349	669	(320 )	(47.8	)%
FX005	13	247	(234 )	(94.7	)%
Portfolio expansion	234	—	234	100.0	%
Other	620	—	620	100.0	%
Total direct research and development expenses	25,825	22,962	2,863	12.5	%
Personnel and other costs	15,489	9,729	5,760	59.2	%
Total research and development expenses	\$41,314	\$32,691	\$8,623	26.4	%

Research and development expenses were \$41.3 million and \$32.7 million for the years ended December 31, 2016 and 2015, respectively. The increase in research and development expenses year over year of \$8.6 million was primarily due to \$2.6 million in Zilretta program expenses related to the previously completed pivotal Phase 2b clinical trial, the conduct of the Phase 3 clinical trial, and manufacturing expenses related to clinical trial and potential commercial supplies. In addition, \$6.0 million in personnel and other employee-related costs for additional headcount, stock compensation expense, and consulting costs contributed to the increase.

## General and Administrative Expenses

General and administrative expenses were \$28.5 million and \$13.4 million for the years ended December 31, 2016 and 2015, respectively. The increase in general and administrative expenses year over year of \$15.1 million was primarily due to salary and related costs associated with additional headcount, costs related to the creation of commercial marketing and sales capabilities and stock compensation expense.

## Other Income (Expense)

Interest income was \$1.5 million and \$1.2 million for the years ended December 31, 2016 and 2015, respectively. The increase in interest income was primarily due to a larger average investment balance during 2016.

Interest expense was \$1.7 million and \$0.6 million for the years ended December 31, 2016 and 2015, respectively. The increase in interest expense was primarily due to interest incurred on the \$30.0 million borrowed under our credit facility with MidCap Funding XIII Trust and Silicon Valley Bank, which we entered into on August 4, 2015.

Other expense was \$1.9 million and \$0.9 million for the years ended December 31, 2016 and 2015, respectively. Other expense increased due to a net amortization of premiums on larger average marketable securities and long-term investments balances.

## Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

The following table summarizes our results of operations for the years ended December 31, 2015 and 2014 (certain items may not foot due to rounding):

	Year Ended December 31,			% Increase/	
(In thousands)	2015	2014	Change	(Decrease)	
Revenue	\$—	\$—	\$—	—	
Operating expenses:					
Research and development	32,691	17,923	14,768	82.4	%
General and administrative	13,372	9,064	4,308	47.5	%
Total operating expenses	46,063	26,987	19,076	70.7	%
Loss from operations	(46,063)	(26,987)	(19,076)	70.7	%
Other income (expense):					
Interest income	1,246	479	767	160.1	%
Interest expense	(571 )	(401 )	(170 )	42.4	%
Other expense	(927 )	(404 )	(523 )	129.5	%
Total other income (expense)	(252 )	(326 )	74	(22.7 )	%
Net loss	\$(46,315)	\$(27,313)	\$(19,002)	69.6	%

## Research and Development Expenses

	Year Ended December 31,			% Increase/	
(In thousands)	2015	2014	Change	(Decrease)	
Direct research and development expenses by program:					
Zilretta	\$22,046	\$11,627	\$10,419	89.6	%
FX007	\$669	\$738	(69 )	(9.3 )	%
FX005	\$247	\$211	36	17.1	%
Total direct research and development expenses	22,962	12,576	10,386	82.6	%
Personnel and other costs	9,729	5,347	4,382	82.0	%
Total research and development expenses	\$32,691	\$17,923	\$14,768	82.4	%

Research and development expenses were \$32.7 million and \$17.9 million for the years ended December 31, 2015 and 2014, respectively. The increase in research and development expenses of \$14.8 million was primarily due to year over year increases of \$10.4 million in Zilretta program expenses related to the previously completed pivotal Phase 2b clinical trial, the conduct of the recently completed Phase 3 clinical trial, and manufacturing expenses related to clinical trial and potential commercial supplies. In addition, \$4.4 million in personnel and other costs for additional headcount, stock compensation expense, and consulting costs contributed to the increase.

### General and Administrative Expenses

General and administrative expenses were \$13.4 million and \$9.1 million for the years ended December 31, 2015 and 2014, respectively. The increase in general and administrative expenses of \$4.3 million was primarily due to salary and related costs associated with additional headcount, costs related to the creation of commercial marketing and sales capabilities and stock compensation expense.

### Other Income (Expense)

Interest income was \$1.2 million and \$0.5 million for the years ended December 31, 2015 and 2014, respectively. The increase in interest income was primarily due to a larger average investment balance during 2015.



Interest expense was \$0.6 million and \$0.4 million for the years ended December 31, 2015 and 2014, respectively. The increase in interest expense was primarily due to interest incurred on the \$15.0 million borrowed under our credit facility with MidCap Financial Funding XIII Trust and Silicon Valley Bank, which we entered into on August 4, 2015.

Other expense was \$0.9 million and \$0.4 million for the years ended December 31, 2015 and 2014, respectively. Other expense increased due to a net amortization of premiums on larger average marketable securities and long-term investments balances.

### Liquidity and Capital Resources

To date, we have not generated any revenue and have incurred losses since our inception in 2007. As of December 31, 2016, we had an accumulated deficit of \$211.7 million. We anticipate that we will continue to incur losses for the foreseeable future. We expect that our research and development and general and administrative expenses will continue to increase and, as a result, we will need additional capital to fund our operations, which we may seek to obtain through one or more equity offerings, debt and convertible debt financings, government or other third-party funding, and licensing or collaboration arrangements.

Since our inception through February 2014, we have funded our operations through the receipt of funds from the private placement of \$80.0 million of equity and debt securities. On February 18, 2014, we completed the initial public offering of our common stock, which resulted in net proceeds to us of approximately \$67.2 million, after deducting underwriting discounts, commissions and offering costs. An additional follow-on offering of our common stock was completed on December 17, 2014, which resulted in net proceeds to us of approximately \$92.2 million after deducting underwriting discounts, commissions, and offering costs paid by the Company. In 2016 we completed two additional follow on offerings. The first follow-on offering of common stock was completed on June 7, 2016 and resulted in net proceeds to us of approximately \$77.4 million after deducting underwriting discounts, commissions, and offering costs paid by the Company. The second follow-on offering of our common stock was completed on November 15, 2016 and resulted in net proceeds to us of approximately \$70.1 million after deducting underwriting discounts, commissions and offering costs paid by the Company. As of December 31, 2016, we had cash and cash equivalents of \$31.3 million, marketable securities of \$174.7 million, and long-term investments of \$4.7 million.

We anticipate that our existing cash, cash equivalents, and marketable securities will fund our operations for at least the next twelve months from the date of issuance of these financial statements. Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to capital preservation.

The following table shows a summary of our cash flows for each of the years ended December 31, 2016, 2015 and 2014:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Cash flows used in operating activities	\$(62,472 )	\$(38,948 )	\$(23,145 )
Cash flows used in investing activities	(132,753 )	(13,245 )	(49,451 )
Cash flows provided by financing activities	163,196	12,040	159,505
Net increase (decrease) in cash and cash equivalents	\$(32,029 )	\$(40,153 )	\$86,909

Net Cash Used in Operating Activities

Operating activities used \$62.5 million of cash in the year ended December 31, 2016. The cash used in operating activities in the year ended December 31, 2016 resulted primarily from our 2016 net loss of \$71.9 million offset by changes in our operating assets and liabilities of \$1.0 million and non-cash charges of \$11.0 million. Changes in our operating assets and liabilities consisted primarily of a \$2.9 million increase in prepaid expenses, offset by an increase of \$2.8 million in accrued expenses and other current liabilities and a decrease of \$1.0 million in accounts payable. The increase in accrued expenses and other current liabilities was primarily attributable to

increased expenses related to clinical research and contract manufacturing services, and the costs associated with the creation of commercial marketing and sales capabilities. These changes were partially offset by an increase in other assets of \$0.5 million. Non-cash charges consisted primarily of \$6.8 million of stock-based compensation expense \$1.2 million in depreciation expense, a \$2.3 million loss on disposal of property and equipment and \$0.7 amortization and accretion related to our investments.

Operating activities used \$38.9 million of cash in the year ended December 31, 2015. The cash used in operating activities in the year ended December 31, 2015 resulted primarily from our 2015 net loss of \$46.3 million offset by changes in our operating assets and liabilities of \$1.5 million and non-cash charges of \$5.9 million. Changes in our operating assets and liabilities consisted primarily of a \$1.6 million increase in our accounts payable, and an increase of \$0.4 million in accrued expenses. The increase in accounts payable, accrued expenses and other current liabilities was primarily attributable to increased expenses related to clinical research and contract manufacturing services. These changes were partially offset by an increase in other assets of \$0.5 million. Non-cash charges consisted primarily of \$4.6 million of stock-based compensation expense and \$0.4 million in depreciation expense and loss on disposal of property and equipment and \$0.9 amortization and accretion related to our investments.

Operating activities used \$23.1 million of cash in the year ended December 31, 2014. The cash used in operating activities in the year ended December 31, 2014 resulted primarily from our net loss of \$27.3 million for the period, offset by non-cash charges of \$3.0 million and changes in our operating assets and liabilities of \$1.2 million. Non-cash charges consisted of \$0.5 million related to depreciation expense and amortization of premiums on marketable securities and \$2.5 million of stock-based compensation expense. Changes in our operating assets and liabilities consisted primarily of a \$0.5 million increase in our accounts payable and a \$1.0 million increase in accrued expenses and other current liabilities, offset by a \$0.3 million increase in our prepaid expenses and other current assets. The increase in accounts payable was primarily due to the timing of our payments to manufacturers, CROs and legal counsel. The \$1.0 million increase in accrued expenses and other current liabilities was primarily attributable to higher clinical research and contract manufacturing expenses. The increase in prepaid expenses and other current assets was primarily due to higher prepaid insurance costs due to becoming a publicly-traded company.

#### Net Cash Used in Investing Activities

Net cash used in investing activities was \$132.8 million in the year ended December 31, 2016. Net cash used in investing activities consisted primarily of cash used to purchase marketable securities of \$196.1 million, partially offset by cash received from the redemption and sale of marketable securities of \$72.1 million. In addition, \$8.4 million of cash was used to purchase property and equipment, primarily to further develop our manufacturing capabilities at our contract manufacturer, Patheon U.K. Limited..

Net cash used in investing activities was \$13.2 million in the year ended December 31, 2015. Net cash used in investing activities in the year ended December 31, 2015 consisted primarily of cash used to purchase marketable securities of \$145.8 million, partially offset by cash received from the redemption and sale of marketable securities of \$137.7 million. In addition, \$5.2 million of cash was used to purchase property and equipment.

Net cash used in investing activities was \$49.5 million in the year ended December 31, 2014. Net cash used in investing activities in the year ended December 31, 2014 consisted primarily of cash paid to purchase marketable securities of \$79.4 million and to purchase property and equipment of \$0.8 million, offset by cash received from the redemption of marketable securities of \$30.7 million.

#### Net Cash Provided by Financing Activities

Net cash provided by financing activities was \$163.2 million, \$12.0 million and \$159.5 million in the years ended December 31, 2016, 2015 and 2014, respectively. Net cash provided by financing activities in the year ended December 31, 2016 consisted of \$15.0 million borrowed under our credit facility with MidCap Financial Funding XIII Trust and Silicon Valley Bank in July 2016, \$147.9 million in proceeds from follow-on offerings of our common stock, as well as, \$0.6 million in proceeds from the exercise of stock options and the issuance of common stock related to our employee stock purchase plan that was partially offset by \$0.3 million in financing costs associated with our follow-on financing in 2016.

Net cash provided by financing activities in the year ended December 31, 2015 consisted of \$15.0 million borrowed under our credit facility with MidCap Funding XIII Trust and Silicon Valley Bank in August 2015, offset by \$3.5 million paid to satisfy our 2013 loan obligation. In addition, we received \$0.9 million in proceeds from the exercise of stock options and the issuance of common stock related to our employee stock purchase plan that was partially offset by \$0.2 million in financing costs associated with our follow-on financing in late 2014 and \$0.1 million in issuance costs associated with our long-term loan obligation.

Net cash provided by financing activities in the year ended December 31, 2014 consisted of \$162.1 million in proceeds from public offerings of our common stock and \$0.3 million from the exercise of stock options, partially offset by the payment of fees incurred in connection with our initial public offering and follow-on financing of \$1.5 million and debt payments of \$1.5 million.

### Contractual Obligations

The following table discloses aggregate information about our contractual obligations and the periods in which payments are due as of December 31, 2016:

	Payments Due By Period				More Than 5
	Less Than 1 Year	1 – 3 Years	3 – 5 Years	More Than 5 Years	
	Total	1 Year	Years	Years	Years
	(in thousands)				
Long-term debt obligation (including interest) <sup>(1)</sup>	\$35,949	\$10,035	\$25,914	\$—	\$—
Operating lease obligations <sup>(2)</sup>	2,330	925	1,405	—	—
Monthly base fee to Patheon <sup>(3)</sup>	63,406	5,530	13,639	14,746	29,491
Total <sup>(5)</sup>	\$101,685	\$16,490	\$40,958	\$14,746	\$29,491

(1) Represents the contractually required principal and interest payments on our credit facility in accordance with the required payment schedule and the 9% final payment to the lender on February 1, 2020. Amounts associated with future interest payments to be made were calculated using the fixed interest rate of 6.25% per annum.

(2) Represents the contractually required payments under our operating lease obligations in existence as of December 31, 2016 in accordance with the required payment schedule. No assumptions were made with respect to renewing the lease terms at the expiration date of their initial terms.

(3) Represents the contractually required monthly base fee to Patheon for the operation of the manufacturing suite. The table above reflects only payment obligations that are fixed or determinable. We enter into contracts in the normal course of business with CROs for clinical trials, with contract manufacturers for clinical and commercial supply manufacturing, and with vendors for preclinical research studies, research supplies and other services and products for operating purposes. These contracts generally provide for termination on notice, and therefore we believe that our non-cancelable obligations under these agreements are not material.

In July 2015, we amended the lease for our primary office space which increased the size of our leased premises and extended the lease term through October 31, 2019. In September 2015, we exercised an option to lease an additional 5,400 square feet under this amended lease. The total cash obligation for the base rent from inception through the lease termination date for the office space committed to under the lease, as amended, is approximately \$2,900,000.

On September 21, 2016 the Company entered into a second amendment to its existing lease for approximately 6,748 additional square feet of rented space located in Burlington, Massachusetts. The lease began October 1, 2016 and expires on October 31, 2017. During October 2016, the Company lease payment for this additional space was \$18,275.83 in incremental rent. Beginning in November 2016 through October 2017, the Company's lease payments for the additional space will increase to \$18,838.17 per month in incremental rental cash outflow.

Also in July 2015, we and Patheon U.K. Limited, or Patheon, entered into a Manufacturing and Supply Agreement (“the Manufacturing Agreement”) and Technical Transfer and Service Agreement, or the Technical Transfer Agreement, for the manufacture of clinical and commercial supplies of Zilretta.

Under the terms of the Technical Transfer Agreement, Patheon has agreed to undertake certain technical transfer activities and construction services needed to prepare its United Kingdom facility for the manufacture of Zilretta in dedicated manufacturing suites. This agreement will remain in effect unless and until it expires or is terminated. Upon termination of this agreement (other than termination by us in the event that Patheon does not meet the construction and manufacturing milestones or for a breach by Patheon), we will pay for the wind down costs related to the removal of our manufacturing equipment and for Patheon’s termination costs up to a capped amount.

Under the terms of the Manufacturing and Supply Agreement, following the FDA approval date of the suites, we have agreed to purchase finished, packaged or unpackaged product from Patheon. In addition, we will pay a monthly base fee to Patheon for the operation of the manufacturing suites, and will reimburse Patheon for purchases of raw materials and equipment made on its behalf, certain nominal expenses and additional services. We estimate that the aggregate monthly base fees and reimbursement costs for equipment will be approximately 100 million GBP over the entire term of the Manufacturing Agreement. Unless earlier terminated, this agreement will expire on the 10th anniversary of the FDA approval date for the initial manufacturing suite. Future expenditures associated with the purchase of finished Zilretta product from Patheon are primarily driven by the potential commercial requirements and demand for our products which cannot be fully determined at this time.

#### Off-Balance Sheet Arrangements

During the periods presented, we did not have, nor do we currently have, any off-balance sheet arrangements that are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

#### Recent Accounting Pronouncements

In May 2014, the FASB issued guidance which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. In August 2015, the FASB issued Accounting Standards Update 2015-14, Revenue from Contracts with Customers: Deferral of the Effective Date. This latest standard defers the effective date of revenue standard ASU 2014-09 by one year and permits early adoption on a limited basis. Since the Company has not generated revenue to date, this guidance will only impact future periods, if any, when revenue is earned. This update will replace existing revenue recognition guidance under GAAP when it becomes effective for the Company beginning January 1, 2018, with early adoption permitted in the first quarter of 2017. The updated standard will permit the use of either the retrospective or cumulative effect transition method. The Company is adopting this guidance as of January 1, 2017 and is currently evaluating the potential impact that the adoption of this guidance may have on the Company’s future financial statements.

In August 2014, the FASB issued accounting guidance for the disclosure of uncertainties related to an entity’s ability to continue as a going concern. The new standard requires management to perform an assessment at interim and annual periods as to the entity’s ability to continue as a going concern and provides specific disclosure guidance. This guidance will be effective for fiscal years, and interim periods within those years, beginning after December 15, 2016 and early adoption is permitted. The Company has included disclosures regarding its ability to continue as a going concern in the Company’s annual financial statements dated December 31, 2016. The adoption of this guidance did not have a material impact on the Company’s annual financial statements.

In November 2015, the FASB issued ASU 2015-17, Income Taxes (Topic 740), to simplify the presentation of deferred income taxes. Under the new standard, both deferred tax liabilities and assets are required to be classified as noncurrent in a classified balance sheet. ASU 2015-17 will become effective for fiscal years, and the interim periods within those years, beginning after December 15, 2016, with early adoption allowed. The Company is currently evaluating the method of adoption. Given the Company has a full valuation against its deferred tax assets



and liabilities, the impact of adopting this guidance is not expected to be material to the Company's financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases ("ASU 2016-02"), to increase transparency and comparability among organizations by recognizing lease assets and liabilities, including for operating leases, on the balance sheet and disclosing key information about leasing arrangements. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact that the adoption of this guidance may have on the Company's financial statements.

In March 2016, the FASB released ASU 2016-09, which amends ASC Topic 718, Compensation-Stock Compensation, to require changes to several areas of employee share-based payment accounting in an effort to simplify share-based reporting. The update revises requirements in the following areas: minimum statutory withholding, accounting for income taxes, forfeitures, and intrinsic value accounting for private entities. For public companies, the new rules will become effective for annual reporting periods beginning after December 15, 2016, and interim reporting periods within such annual period. The Company adopted this guidance beginning on January 1, 2017. Upon adoption, the Company will no longer record stock compensation expense net of forfeitures.

In August 2016, the FASB issued ASU 2016-15, Statement of cash flows (Topic 230), to increase the consistency of presentation in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 will become effective for fiscal years, and the interim periods within those years, beginning after December 15, 2017. The Company is currently evaluating the potential impact that the adoption of this guidance may have on the Company's financial statements

#### JOBS Act

On April 5, 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have irrevocably elected not to avail ourselves of this extended transition period and, as a result, we will adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

We are relying on other exemptions and reduced reporting requirements provided by the JOBS Act. Subject to certain conditions set forth in the JOBS Act, as an "emerging growth company," we intend to rely on certain of these exemptions, including without limitation, (i) providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act, and (ii) complying with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements, known as the auditor discussion and analysis. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of our initial public offering, (b) in which we have total annual gross revenue of at least \$1.0 billion, or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds \$700.0 million as of the prior June 30th, and (2) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period. As of December 31, 2016 we had not met any of these criteria.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. Due to the short-term duration of our investment portfolio and the low risk profile of our investments, an immediate 10% change in interest rates would not have a material effect on the fair market value of our portfolio. Accordingly, we would not expect our operating results or cash flows to be affected to any significant degree by a sudden change in market interest rates on our investment portfolio.

Our term loan carries a fixed interest rate and, thus, we are not subject to interest rate risk.

We have borrowed \$30.0 million under our credit facility. Amounts outstanding under the credit facility bear interest at a fixed rate equal to 6.25% per annum. As of December 31, 2016, the carrying value of the term loan was \$30.5 million.

We do not believe that our cash, cash equivalents and marketable securities have significant risk of default or illiquidity. While we believe our cash and cash equivalents and certificates of deposit do not contain excessive risk, we cannot provide absolute assurance that in the future our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash and cash equivalents at one or more financial institutions that are in excess of federally insured limits.

Most of our transactions are conducted in U.S. dollars. We do have certain material agreements with vendors located outside the United States, which have transactions conducted primarily in British Pounds and Euros. As of December 31, 2016 we had approximately \$0.4 million in payables to vendors denominated in currencies other than the U.S. dollar. As of December, 2016, we also had approximately \$9.1 million in cash denominated in British pounds. A hypothetical 10% change in foreign exchange rates would result in either a \$0.8 million increase, in the event the U.S. dollar strengthens relative to the British pound, or a \$0.7 million decrease, in the event the U.S. dollar weakens relative to the British pound, of cash denominated in British pounds.

Item 8. Financial Statements and Supplementary Data  
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
<u>Report of Independent Registered Public Accounting Firm</u>	74
<u>Consolidated Balance Sheets</u>	75
<u>Consolidated Statements of Operations and Comprehensive Loss</u>	76
<u>Consolidated Statements of Changes in Convertible Preferred Stock and Stockholders' Equity (Deficit)</u>	77
<u>Consolidated Statements of Cash Flows</u>	78
<u>Notes to Consolidated Financial Statements</u>	79

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders

of Flexion Therapeutics, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations and comprehensive loss, of changes in convertible preferred stock and stockholders' equity (deficit) and of cash flows present fairly, in all material respects, the financial position of Flexion Therapeutics, Inc. and its subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. 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 audits. We conducted our audits of these financial statements 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, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

March 10, 2017

## Flexion Therapeutics, Inc.

## Consolidated Balance Sheets

	December 31, 2016	December 31, 2015
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$30,915,374	\$62,944,044
Marketable securities	174,688,468	48,302,507
Accounts receivable	—	95,285
Prepaid expenses and other current assets	3,789,732	760,872
Total current assets	209,393,574	112,102,708
Property and equipment, net	11,663,559	7,442,477
Long-term investments	4,725,041	7,357,423
Other assets	—	155,904
Restricted cash	480,000	80,000
Total assets	\$226,262,174	\$127,138,512
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable	\$2,160,869	\$3,692,414
Accrued expenses and other current liabilities	6,245,233	4,366,560
Current portion of long-term debt	9,133,991	—
Total current liabilities	17,540,093	8,058,974
Long-term debt	21,398,792	15,002,039
Other long-term liabilities	291,333	91,055
Total liabilities	39,230,218	23,152,068
Commitments and contingencies		
Preferred Stock, \$0.001 par value; 10,000,000 shares authorized at		
December 31, 2016 and December 31, 2015 and 0 shares issued and		
outstanding at December 31, 2016 and December 31, 2015	—	—
Stockholders' equity:		
Common stock, \$0.001 par value; 100,000,000 shares authorized; 31,667,469		
and 21,570,395 shares issued and outstanding, at December 31, 2016 and		
December 31, 2015, respectively	31,667	21,570
Additional paid-in capital	398,757,135	243,853,799
Accumulated other comprehensive income	(70,613 )	(96,651 )
Accumulated deficit	(211,686,233)	(139,792,274)
Total stockholders' equity	187,031,956	103,986,444
Total liabilities and stockholders' equity	\$226,262,174	\$127,138,512

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

Flexion Therapeutics, Inc.

## Consolidated Statements of Operations and Comprehensive Loss

	2016	2015	2014
Revenue	\$—	\$—	\$—
Operating expenses:			
Research and development	41,313,942	32,691,445	17,923,348
General and administrative	28,466,350	13,371,631	9,063,926
Total operating expenses	69,780,292	46,063,076	26,987,274
Loss from operations	(69,780,292)	(46,063,076)	(26,987,274)
Other income (expense):			
Interest income	1,520,659	1,246,133	478,715
Interest expense	(1,747,186 )	(570,990 )	(401,370 )
Other income (expense), net	(1,887,140 )	(927,518 )	(403,735 )
Total other income (expense)	(2,113,667 )	(252,375 )	(326,390 )
Net loss	\$(71,893,959)	\$(46,315,451)	\$(27,313,664)
Net loss per common share, basic and diluted	\$(2.84 )	\$(2.15 )	\$(1.97 )
Weighted average common shares outstanding, basic and diluted	25,296,527	21,497,119	13,893,961
Other comprehensive gain (loss) :			
Unrealized gains (losses) from available-for-sale securities,			
net of tax of \$0	26,038	(91,411 )	(5,212 )
Total other comprehensive income (loss)	26,038	(91,411 )	(5,212 )
Comprehensive loss	\$(71,867,921)	\$(46,406,862)	\$(27,318,876)

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

Flexion Therapeutics, Inc.

Consolidated Statements of Changes in Convertible Preferred Stock and Stockholders' Equity (Deficit)

	Series A and B							
	Convertible Preferred							
	Stock		Common Stock			Accumulated		Total
					Additional	Other		Stockholders'
	Shares	Amount	Shares	Par Value	Paid-in Capital	Comprehensive Income (Loss)	Accumulated Deficit	Equity (Deficit)
Balance at December 31,								
2013	72,780,250	\$74,806,213	794,090	\$794	\$1,458,503	\$(28 )	\$(66,163,159 )	\$(64,703,890 )
Conversion of Series A and Series B Convertible Preferred Stock	(72,780,250)	(74,806,213)	8,952,057	8,952	74,797,261	—	—	74,806,213
Issuance of Common Stock net of issuance costs	—	—	11,546,000	11,546	159,311,192	—	—	159,322,738
Exercise of stock options	—	—	141,141	141	304,355	—	—	304,496
Employee Stock Purchase Plan	—	—	6,770	7	80,624			80,631
Stock-based compensation expense	—	—	—	—	2,450,579	—	—	2,450,579
Net loss	—	—	—	—	—	—	(27,313,664 )	(27,313,664 )
Other comprehensive income	—	—	—	—	—	(5,212 )	—	(5,212 )



Edgar Filing: Flexion Therapeutics Inc - Form 10-K

loss								
Balance at December 31,								
2014	—	\$—	21,440,058	\$21,440	\$238,402,514	\$(5,240 )	\$(93,476,823 )	\$144,941,891
Exercise of stock options	—	—	109,441	109	592,678	—	—	592,787
Employee Stock Purchase								
Plan	—	—	20,896	21	275,928			275,949
Stock-based compensation								
expense	—	—	—	—	4,582,679	—	—	4,582,679
Net loss	—	—	—	—	—	—	(46,315,451 )	(46,315,451 )
Other comprehensive								
loss	—	—	—	—	—	(91,411 )	—	(91,411 )
Balance at December 31,								
2015		\$—	21,570,395	\$21,570	\$243,853,799	\$(96,651 )	\$(139,792,274 )	\$103,986,444
Issuance of Common Stock								
net of issuance costs	—	—	10,040,000	10,040	147,491,125			147,501,165
Exercise of stock options	—	—	30,194	30	166,786			166,816
Employee Stock Purchase								
Plan	—	—	26,880	27	475,621			475,648
Stock-based compensation								
expense	—	—			6,769,804			6,769,804
Net loss	—	—	—	—	—	—	(71,893,959 )	(71,893,959 )
Other comprehensive								
income	—	—	—	—	—	26,038		26,038
Balance at December 31,								
2016		\$—	31,667,469	\$31,667	\$398,757,135	\$(70,613 )	\$(211,686,233 )	\$187,031,956

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



Flexion Therapeutics, Inc.

## Consolidated Statements of Cash Flows

	Year Ended		
	December 31, 2016	2015	2014
Cash flows from operating activities			
Net loss	\$(71,893,959 )	\$(46,315,451 )	\$(27,313,664 )
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation	1,150,961	238,153	120,341
Stock-based compensation expense	6,769,804	4,582,679	2,450,579
Other non-cash charges	36,607	41,103	16,500
Amortization of premium (discount) on marketable	728,552	871,215	366,231
Loss on disposal of fixed assets	2,283,344	149,983	—
Premium paid on securities purchased	(542,567 )	—	—
Changes in operating assets and liabilities:			
Accounts receivable	95,285	—	—
Prepaid expenses, other current and long-term assets	(2,872,955 )	(526,247 )	(320,352 )
Accounts payable	(992,739 )	1,581,164	518,032
Accrued expenses and other current and long-term liabilities	2,765,899	428,769	1,017,412
Net cash used in operating activities	(62,471,768 )	(38,948,632 )	(23,144,921 )
Cash flows from investing activities			
Purchases of property and equipment	(8,439,577 )	(5,197,326 )	(802,481 )
Change in restricted cash	(400,000 )	48,000	—
Purchases of marketable securities	(196,060,561 )	(145,797,556 )	(79,383,553 )
Sale and redemption of marketable securities	72,147,035	137,702,156	30,735,000
Net cash used in investing activities	(132,753,103 )	(13,244,726 )	(49,451,034 )
Cash flows from financing activities			
Payment of debt issuance costs	(42,034 )	(107,741 )	—
Payments on debt	—	(3,500,000 )	(1,500,000 )
Proceeds from the offering of common stock, net of underwriter's commission and fees	—	—	—
Proceeds from borrowings under term loan	15,000,000	15,003,533	—
Payments of public offering costs	(293,368 )	(224,648 )	(1,517,484 )
Proceeds from the issuance of common stock	147,889,139	—	162,137,580
Proceeds from the exercise of stock options	166,816	592,787	304,496
Proceeds from Employee Stock Purchase Plan	475,648	275,949	80,631
Net cash provided by financing activities	163,196,201	12,039,880	159,505,223
Net increase (decrease) in cash and cash equivalents	(32,028,670 )	(40,153,478 )	86,909,268
Cash and cash equivalents at beginning of period	62,944,044	103,097,522	16,188,254

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Cash and cash equivalents at end of period	\$30,915,374	\$62,944,044	\$103,097,522
Supplemental disclosures of cash flow information:			
Cash paid for interest	\$1,296,875	\$572,340	\$364,889
Supplemental disclosures of non-cash financing activities:			
Public offering costs included in accounts payable or accrued	\$94,606	\$—	\$224,648
Conversion of convertible preferred stock into common stock	\$—	\$—	\$74,806,213
Purchases of property and equipment in accounts payable and			
accrued expenses	\$622,005	\$1,575,907	\$52,011

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

Flexion Therapeutics, Inc.

## Notes to Consolidated Financial Statements

### 1. Nature of the Business

Flexion Therapeutics, Inc. (“Flexion” or the “Company”) was incorporated under the laws of the state of Delaware on November 5, 2007. Flexion is a specialty pharmaceutical company focused on the development and commercialization of novel, local therapies for the treatment of patients with musculoskeletal conditions, beginning with osteoarthritis, a type of degenerative arthritis (“OA”). Flexion’s lead product candidates addresses the OA pain treatment spectrum, from moderate to severe knee pain, and provides the Company with multiple opportunities to achieve its goal of commercializing novel, patient-focused therapies.

The Company is subject to risks and uncertainties common to early-stage companies in the biopharmaceutical industry, including, but not limited to, new technological innovations, dependence on key personnel, protection of proprietary technology, compliance with government regulations, and ability to secure additional capital to fund operations. Product candidates currently under development will require significant additional research and development efforts, including extensive preclinical and clinical testing and regulatory approval prior to commercialization. These efforts require significant amounts of additional capital, adequate personnel infrastructure and extensive compliance reporting capabilities. The Company’s product candidates are all in the development stage. There can be no assurance that development efforts, including clinical trials, will be successful. Even if the Company’s product development efforts are successful, it is uncertain when, if ever, the Company will realize significant revenue from product sales.

The accompanying consolidated financial statements have been prepared on a basis which assumes that the Company will continue as a going concern and which contemplates the realization of assets and satisfaction of liabilities and commitments in the normal course of business. The Company has incurred recurring losses and negative cash flows from operations. As of December 31, 2016 and 2015, the Company had cash, cash equivalents, marketable securities, and long-term investments of \$210,328,883 and \$118,603,974, respectively. Management believes that current cash, cash equivalents and marketable securities on hand at December 31, 2016 should be sufficient to fund operations for at least the next twelve months beyond the date of issuance. The future viability of the Company is dependent on its ability to raise additional capital to finance its operations and to fund increased research and development costs in order to seek approval for commercialization of its product candidates. This capital is necessary for the Company to perform the research and development activities required to develop the Company’s product candidates in order to generate future revenue streams. The Company may not be able to obtain financing on acceptable terms, or at all. If the Company is unable to obtain funding on a timely basis the Company may need to curtail its operations including research and development which could adversely affect its prospects.

### 2. Financing Transactions

On February 18, 2014, the Company completed an initial public offering (“IPO”) of its common stock, which resulted in the sale of 5,750,000 shares of common stock at a price to the public of \$13.00 per share, including shares sold pursuant to the exercise in full of the underwriters’ option to purchase additional shares. The Company received net proceeds from the IPO of \$67.2 million after deducting underwriting discounts, commissions, and offering costs paid by the Company. In preparation for the IPO, the Company’s Board of Directors and stockholders approved a 1-for-8.13

reverse stock split of the Company's common stock and a proportional adjustment to the existing conversion ratios for each series of Convertible Preferred Stock, effective January 27, 2014. All share and per share amounts in the consolidated financial statements and notes thereto have been retroactively adjusted, where necessary, to give effect to this reverse stock split. In connection with the closing of the IPO, all of the Company's outstanding redeemable convertible preferred stock automatically converted to common stock as of February 18, 2014, resulting in an additional 8,952,057 shares of common stock of the Company becoming outstanding.

On December 17, 2014, the Company completed a follow-on public offering of its common stock, which resulted in the sale of 5,796,000 shares of the Company's common stock at a price to the public of \$17.00 per share including shares sold pursuant to the exercise in full of the underwriters' option to purchase additional shares. The

Company received net proceeds from the follow-on financing of \$92.2 million after deducting underwriting discounts, commissions, and offering costs paid by the Company.

On June 8, 2016, the Company completed a follow-on public offering of its common stock, which resulted in the sale of 5,900,000 shares of the Company's common stock at a price to the public of \$14.00 per share including shares sold pursuant to the partial exercise of the underwriters' option to purchase additional shares. The Company received net proceeds from the follow-on financing of \$77.4 million after deducting underwriting discounts, commissions, and offering costs paid by the Company.

On November 15, 2016, the Company completed a follow-on public offering of its common stock, which resulted in the sale of 4,140,000 shares of the Company's common stock at a price to the public of \$18.00 per share including shares sold pursuant to the exercise in full of the underwriters' option to purchase additional shares. The Company received net proceeds from the follow-on financing of \$70.1 million after deducting underwriting discounts, commissions, and offering costs paid by the Company.

The Company's total issued common stock as of December 31, 2016 was 31,667,469 shares.

### 3. Summary of Significant Accounting Policies

#### Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission (the "SEC") and Generally Accepted Accounting Principles ("GAAP") for financial information, including the accounts of the Company and its wholly owned subsidiary after elimination of all significant intercompany accounts and transactions.

#### Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and judgments that may affect the reported amounts of assets and liabilities, expenses and related disclosures. The Company bases estimates and judgments on historical experience and on various other factors that it believes to be reasonable under the circumstances. The most significant estimates in these consolidated financial statements include useful lives with respect to long-lived assets, such as property and equipment and leasehold improvements, accounting for stock-based compensation, and accrued expenses, including clinical research costs. The Company's actual results may differ from these estimates under different assumptions or conditions. The Company evaluates its estimates on an ongoing basis. Changes in estimates are reflected in reported results in the period in which they become known by the Company's management.

#### Consolidation

The accompanying consolidated financial statements include the Company and its wholly-owned subsidiary, Flexion Securities Corporation, Inc. The Company has eliminated all intercompany transactions. In addition, Flexion Therapeutics, Inc. is registered to do business in the United Kingdom through its branch office located in Swindon, United Kingdom.

#### U.S. Government Grant

The Company performs research and development for a U.S. Government agency under a cost reimbursable grant for clinical development of Zilretta. The related costs incurred under the grant are included in research and development expense in the statement of operations. Reimbursements were recorded as an offset to R&D expense when invoices for allowable costs were prepared and submitted to the Department of Defense. Due to challenges of enrolling military personnel with post-traumatic knee OA, we discontinued the Phase 2 trial and terminated the grant. Payments under cost reimbursable grants with agencies of the U.S. Government are provisional payments subject to adjustment upon audit by the U.S. government.



### Accounts Receivable

Accounts receivable represents allowable costs under the Company's U.S. Government agency grant for which the Company has not yet received reimbursement. The Company invoices the government on a quarterly basis for reimbursable costs under the grant. Reimbursable costs that have not been invoiced on the last day of the quarter are recorded as unbilled accounts receivable. As of December 31, 2016 and 2015, there were unbilled accounts receivable of \$0 and \$95,285, respectively.

### Cash and Cash Equivalents

The Company considers all highly liquid investments with a maturity of three months or less at the date of purchase to be cash equivalents. The Company currently invests available cash in money market funds of a major financial institution, corporate bonds, government obligations and commercial paper.

### Marketable Securities

Marketable securities consist of investments with original maturities greater than ninety days and less than one year from the balance sheet date. Long-term investments consist of investments with maturities of greater than one year. The Company classifies all of its investments as available-for-sale securities. Accordingly, these investments are recorded at fair value, which is based on quoted market prices. Realized gains and losses are determined on a specific identification basis and are included in other income (loss). Amortization and accretion of discounts and premiums is recorded in other income.

### Restricted Cash

The Company purchased a \$30,000 certificate of deposit to collateralize a credit card account with a commercial bank. In 2016, the Company placed \$400,000 in an account at a commercial bank to further collateralize the credit card account. These balances are classified as long-term restricted cash as of December 31, 2016 and 2015.

In addition the Company posted a letter of credit to the lessor of the Company's Burlington facility as a security deposit pursuant to the lease agreement. As of December 31, 2016 and 2015, there was \$50,000 as long-term restricted cash related to the aforementioned lease agreement.

### Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation and amortization expense is recognized using the straight-line method over the following estimated useful lives:

	Estimated
	Useful Life
	(Years)
Computers, office equipment, and minor computer	
software	3
Computer software	7

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Manufacturing equipment	7-10
Furniture and fixtures	5

Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the related asset. Costs of major additions and betterments are capitalized and depreciated on a straight-line basis over their useful lives. Repairs and maintenance costs are expensed as incurred. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are removed from the accounts and any resulting gain or loss is credited or charged to income. Property and equipment includes construction-in-progress, which is not yet in service, and is estimated to have a useful life of 7 years once placed into service.

#### Foreign Currencies

The Company maintains a bank account designated in British Pounds. All foreign currency payables and cash balances are measured at the applicable exchange rate at the end of the reporting period. All associated gains and losses from foreign currency transactions are reflected in the consolidated statements of operations within other income and expenses, and were not significant in any period.

#### Impairment of Long-Lived Assets

The Company reviews its 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.

#### Debt Issuance Costs, net

As of December 31, 2016 and 2015, the carrying value of debt issuance costs was \$100,760 and \$124,041, respectively, presented as a direct deduction from the carrying amounts of long-term debt. In addition, \$36,607, \$41,103 and \$16,500 respectively, of debt issuance costs were amortized and recognized as interest expense in the statement of operations for the years ended December 31, 2016, 2015 and 2014.

#### Deferred Offering Costs

The Company capitalizes certain legal, accounting and other third-party fees that are directly associated with in-process equity financings as other assets until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders' deficit as a reduction of additional paid-in capital generated as a result of the offering. If the equity financing is no longer considered probable of being consummated, the deferred offering costs would be expensed immediately as a charge to operating expenses in the consolidated statement of operations. The Company completed its initial public offering in February 2014 and recorded deferred offering costs of \$1,623,540 as a reduction to additional paid-in capital. The Company did not record any deferred offering costs during the year ended December 31, 2016 or 2015.

#### Research and Development

Research and development expenses are comprised of costs incurred in performing research and development activities, including salaries and benefits, facilities costs, overhead costs, depreciation, clinical trial and related clinical manufacturing costs, contract services and other related costs. Research and development costs are expensed to operations as the related obligation is incurred.

#### Patent Costs

All patent-related costs incurred in connection with filing and prosecuting patent applications are recorded as general and administrative expenses as incurred, as recoverability of such expenditures is uncertain.

#### Accounting for Stock-Based Compensation

The Company measures all stock options and other stock based-awards granted to employees at the fair value at the date of grant using the Black-Scholes option-pricing model. The fair value of the awards is recognized as expense, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the

respective award. The straight-line method of expense recognition is applied to all awards with service-only conditions.

For stock-based awards granted to non-employees, compensation expense is recognized over the period during which services are rendered by such non-employees until completed. At the end of each financial reporting period prior to completion of the service, the fair value of these awards is re-measured using the then current fair value of the Company's common stock and updated assumption inputs in the Black-Scholes option-pricing model.

The Company classifies stock-based compensation expense in the consolidated statements of operations in the same manner in which the award recipient's payroll costs are classified, or in the case of a non-employee, in the same manner as the award recipient's service costs are classified.

The Company recognizes compensation expense only for the portion of awards that are expected to vest. In developing a forfeiture rate estimate, the Company has considered its historical experience to estimate pre-vesting forfeitures for service-based awards. The impact of a forfeiture rate adjustment will be recognized in full in the period of adjustment, and if the actual forfeiture rate is materially different from the Company's estimate, the Company may be required to record adjustments to stock-based compensation expense in future periods.

#### Concentration of Credit Risk and Significant Suppliers

Financial instruments that potentially expose the Company to concentration of credit risk consist primarily of commercial paper and corporate bonds. The Company generally invests its cash in money market funds, government and corporate bonds, and commercial paper at one financial institution. The Company does not believe that it is subject to unusual credit risk beyond the normal credit risk associated with commercial banking relationships.

The Company is completely dependent on third-party manufacturers and product suppliers for research and potential commercial activities. In particular, the Company relies and expects to continue to rely on a limited number of manufacturers and relies on them to purchase from third-party suppliers the materials necessary to produce its product candidates for its clinical trials, and if Zilretta is approved, for commercial supply. These programs would be adversely affected by a significant interruption in the supply of active pharmaceutical ingredients.

#### Comprehensive Loss

Comprehensive income (loss) includes net loss as well as other changes in stockholders' deficit that result from transactions and economic events other than those with stockholders. The Company's only element of other comprehensive income (loss) in all periods presented was unrealized gains (losses) on available-for-sale securities.

#### Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the estimated future tax consequences of events that have been recognized in the financial statements or in the Company's tax returns. Deferred taxes are determined based on the differences between financial statement carrying amounts of existing assets and liabilities and their respective tax basis. Deferred tax assets and liabilities are measured using enacted rates in effect for the year in which these temporary differences are expected to be recovered or settled. Changes in deferred tax assets and liabilities are recorded in the provision for income taxes. The Company assesses the likelihood that its deferred tax assets will be recovered from future taxable income and, to the extent it believes, based upon the weight of available evidence, that it is more likely than not that all or a portion of deferred tax assets will not be realized, a valuation allowance is established through a charge to income tax expense. Potential recovery of deferred tax assets is evaluated by estimating the future taxable profits

expected and considering prudent and feasible tax planning strategies.

The Company accounts for uncertainty in income taxes recognized in the financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax

position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the financial statements. The amount of benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties.

#### Fair Value Measurements

Fair value is defined as the exchange price that would be received to sell an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Financial assets and liabilities carried at fair value are to be classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

- Level 1 — Quoted market prices in active markets for identical assets or liabilities. Level 1 consists primarily of financial instruments whose value is based on quoted market prices, such as exchange-traded instruments and listed equities.
- Level 2 — Observable inputs (other than Level 1 quoted prices) such as quoted prices in active markets for similar assets or liabilities, quoted prices in markets that are not active for identical or similar assets or liabilities, or other inputs that are observable or can be corroborated by observable market data.
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to determining the fair value of the assets or liabilities, including pricing models, discounted cash flow methodologies and similar techniques.

The Company's financial instruments consist of cash equivalents, marketable securities, restricted cash, accounts payable and accrued expenses, and its term loan (Note 9). The estimated fair value of the Company's financial instruments approximates their carrying values.

#### Net Loss Per Share

The Company follows the two-class method when computing net loss per share as the Company has issued shares that meet the definition of participating securities. The two-class method determines net loss per share for each class of common and participating securities according to dividends declared or accumulated and participation rights in undistributed earnings. The two-class method requires income available to common stockholders for the period to be allocated between common and participating securities based on their respective rights to receive dividends as if all income for the period had been distributed.

The Company's convertible preferred shares contractually entitle the holders of such shares to participate in dividends, but do not contractually require the holders of such shares to participate in the losses of the Company. Accordingly, in periods in which the Company reports a net loss or a net loss attributable to common stockholders resulting from preferred stock dividends, net losses are not allocated to participating securities. In periods of net loss, the Company does not increase its net loss attributable to common stockholders by accreting dividends on preferred stock, as the dividends are not cumulative under the terms of the preferred stock. As of December 31, 2016, there were no shares of preferred stock issued and outstanding. The Company reported a net loss attributable to common stockholders for the years ended December 31, 2016, 2015 and 2014.

Basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted average number of shares of common stock outstanding for the period. Diluted net loss attributable to common stockholders is computed by adjusting net loss attributable to common stockholders to reallocate undistributed earnings based on the potential impact of dilutive securities, including outstanding stock options and unvested restricted common stock. Diluted net loss per share attributable to common stockholders is computed by dividing the diluted net loss attributable to common stockholders by the weighted average number of common shares outstanding for the period, including potential dilutive common shares assuming the dilutive effect of outstanding stock options and unvested restricted common stock. For periods in which the



Company has reported net losses, diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive. Potential common shares will always be anti-dilutive for periods in which the Company has reported a net loss. Diluted net loss per share attributable to common stockholders is the same as basic net loss per share attributable to common stockholders for the years ended December 31, 2016, 2015 and 2014.

#### Segment Data

The Company manages its operations as a single operating segment for the purposes of assessing performance and making operating decisions. The Company is a specialty pharmaceutical company focused on the development and commercialization of novel, local therapies. No revenue has been generated since inception, and all assets are held in the United States.

#### Recently Issued and Adopted Accounting Pronouncements

In May 2014, the FASB issued guidance which supersedes all existing revenue recognition requirements, including most industry-specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. In August 2015, the FASB issued Accounting Standards Update 2015-14, Revenue from Contracts with Customers: Deferral of the Effective Date. This latest standard defers the effective date of revenue standard ASU 2014-09 by one year and permits early adoption on a limited basis. Since the Company has not generated revenue to date, this guidance will only impact future periods, if any, when revenue is earned. This update will replace existing revenue recognition guidance under GAAP when it becomes effective for the Company beginning January 1, 2018, with early adoption permitted in the first quarter of 2017. The updated standard will permit the use of either the retrospective or cumulative effect transition method. The Company is adopting this guidance as of January 1, 2017 and is currently evaluating the potential impact that the adoption of this guidance may have on the Company's future financial statements.

In August 2014, the FASB issued accounting guidance for the disclosure of uncertainties related to an entity's ability to continue as a going concern. The new standard requires management to perform an assessment at interim and annual periods as to the entity's ability to continue as a going concern and provides specific disclosure guidance. This guidance will be effective for fiscal years, and interim periods within those years, beginning after December 15, 2016 and early adoption is permitted. The Company has included disclosures regarding its ability to continue as a going concern in the Company's annual financial statements dated December 31, 2016.

In November 2015, the FASB issued ASU 2015-17, Income Taxes (Topic 740), to simplify the presentation of deferred income taxes. Under the new standard, both deferred tax liabilities and assets are required to be classified as noncurrent in a classified balance sheet. ASU 2015-17 will become effective for fiscal years, and the interim periods within those years, beginning after December 15, 2016, with early adoption allowed. The Company is currently evaluating the method of adoption. Given the Company has a full valuation against its deferred tax assets and liabilities, the impact of adopting this guidance is not expected to be material to the Company's financial statements.

In February 2016, the FASB issued ASU 2016-02, Leases ("ASU 2016-02"), to increase transparency and comparability among organizations by recognizing lease assets and liabilities, including for operating leases, on the balance sheet and disclosing key information about leasing arrangements. ASU 2016-02 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. The Company is currently evaluating the impact that the adoption of this guidance may have on the Company's financial statements.

In March 2016, the FASB released ASU 2016-09, which amends ASC Topic 718, Compensation-Stock Compensation, to require changes to several areas of employee share-based payment accounting in an effort to simplify share-based reporting. The update revises requirements in the following areas: minimum statutory withholding, accounting for income taxes, forfeitures, and intrinsic value accounting for private entities. For public companies, the new rules will become effective for annual reporting periods beginning after December 15, 2016, and interim reporting periods within such annual period. The Company adopted this guidance beginning on January 1, 2017. Upon adoption, the Company will no longer record stock compensation expense net of forfeitures.

In August 2016, the FASB issued ASU 2016-15, Statement of cash flows (Topic 230), to increase the consistency of presentation in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 will become effective for fiscal years, and the interim periods within those years, beginning after December 15, 2017. The Company is currently evaluating the potential impact that the adoption of this guidance may have on the Company's financial statements.

#### 4. Fair Value of Financial Assets

The following tables present information about the Company's assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2016 and 2015 and indicate the level of the fair value hierarchy utilized to determine such fair value:

Fair Value Measurements as of December 31, 2016 Using:				
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Cash equivalents	\$—	\$9,830,127	\$ —	\$9,830,127
Marketable securities	—	179,413,509	—	179,413,509
	\$—	\$189,243,636	\$ —	\$189,243,636

Fair Value Measurements as of December 31, 2015 Using:				
	Level 1	Level 2	Level 3	Total
<b>Assets:</b>				
Cash equivalents	\$—	\$61,533,797	\$ —	\$61,533,797
Marketable securities	—	55,659,930	—	55,659,930
	\$—	\$117,193,727	\$ —	\$117,193,727

As of December 31, 2016 and 2015, the Company's cash equivalents that are invested in money market funds are valued based on Level 2 inputs. The Company measures the fair value of marketable securities using Level 2 inputs and primarily relies on quoted prices in active markets for similar marketable securities. During the years ended December 31, 2016 and 2015, there were no transfers between Level 1, Level 2 and Level 3. Amortization and accretion of discounts and premiums are recorded in other income.

As outlined in Note 9, the 2013 term loan with MidCap Financial SBIC, LP ("2013 term loan") and 2015 term loan with MidCap Financial Trust ("2015 term loan"), outstanding under the Company's credit and security agreements, are reported at their carrying value in the accompanying consolidated balance sheet. The Company determined the fair value of the term loans using an income approach which utilizes a discounted cash flow analysis based on current market interest rates for debt issuances with similar remaining years to maturity, adjusted for credit risk. The term loans were valued using Level 2 inputs as of December 31, 2016 and December 31, 2015. The result of the calculation

yielded a fair value that approximates carrying value.

## 5. Marketable Securities

As of December 31, 2016 and 2015, the fair value of available-for-sale marketable securities by type of security was as follows:

December 31, 2016				
		Gross Unrealized	Gross Unrealized	
(In thousands)	Amortized Cost	Gains	Losses	Fair Value
Commercial Paper	\$7,769,334	\$ —	\$ —	\$7,769,334
U.S. Government obligations	\$75,523,761	\$ 5,029	\$ (11,860)	\$75,516,930
Corporate Bonds	\$96,192,720	\$ 811	\$ (66,286)	\$96,127,245
	\$179,485,815	\$ 5,840	\$ (78,146)	\$179,413,509

December 31, 2015

Gross Unrealized    Gross Unrealized

(In thousands)	Amortized Cost	Gains	Losses	Fair Value
Corporate bonds	55,756,581	3,783	(100,434)	55,659,930
	\$55,756,581	\$ 3,783	\$ (100,434)	) \$55,659,930

At December 31, 2016, marketable securities consisted of \$174,688,468 of investments that mature within twelve months and \$4,725,041 of investments that mature within fifteen months. At December 31, 2015, marketable securities consisted of \$48,302,507 of investments that mature within twelve months and \$7,357,423 of investments that mature within fifteen.

#### 6. Prepaid Expenses, Other Current Assets, and Other Assets

Prepaid expenses and other current assets and other assets consisted of the following as of December 31, 2016 and 2015:

	December 31,	
	2016	2015
Prepaid expenses	\$1,085,198	\$135,002
Security Deposits	2,099,029	182,009
Interest receivable on marketable securities	604,794	441,766
Employee advances	711	2,095
Total prepaid expenses and other current assets	\$3,789,732	\$760,872

On December 1, 2016, Flexion paid a refundable NDA fee in the amount of \$2,038,100.00 to the FDA. The Company evaluated each of the published criteria to qualify for a waiver and concluded all criteria were met and thus, obtaining a refund of the fee was probable. As of December 31, 2016 the NDA fee was classified as a deposit in other current assets.

#### 7. Property and Equipment, Net

Property and equipment, net, as of December 31, 2016 and 2015 consisted of the following:

	December 31,	
(In thousands)	2016	2015
Computer and office equipment	\$572,901	\$393,148

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Manufacturing equipment	10,098,577	2,533,737
Furniture and fixtures	402,301	290,577
Software	433,838	341,906
Leasehold improvements	278,288	239,456
Construction—in progress	1,253,738	4,133,893
	13,039,643	7,932,717
Less: Accumulated depreciation	(1,376,084 )	(490,240 )
Total property and equipment, net	\$11,663,559	\$7,442,477

Depreciation expense for the years ended December 31, 2016, 2015 and 2014, was \$1,150,961, \$238,153, and \$120,341, respectively. During the years ended December 31, 2016 and 2015, \$2,670,413 and \$166,335 of property and equipment was disposed of, resulting in a loss of \$2,283,343 and \$149,983, respectively.

## 8. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities at December 31, 2016 and 2015 consisted of the following:

(In thousands)	December 31,	
	2016	2015
Research and Development	\$1,604,810	\$2,059,800
Payroll and other employee-related expenses	3,393,201	1,648,447
Professional services fees	926,550	503,453
Interest expense	161,458	80,729
Other	159,214	74,131
Total accrued expenses and other current liabilities	\$6,245,233	\$4,366,560

## 9. Long-term Debt

On January 3, 2013, the Company entered into a credit and security agreement with MidCap Financial SBIC, LP (“MidCap”) under which it immediately borrowed \$5,000,000 as a term loan (“2013 term loan”). The term loan accrued interest monthly at an interest rate of 8% per annum and had a term of 45 months. As the term loan had a 15-month interest-only period, the term loan principal balance, along with any accrued interest, was to be paid in 30 equal monthly installments beginning April 1, 2014 and ending September 1, 2016. In addition to these principal payments, the Company was required to make a payment of \$175,000 to the lender on September 1, 2016, which was being accreted to the carrying value of the debt using the effective interest rate method. On March 31, 2015, the Company paid MidCap \$3,236,019, representing the outstanding principal of the debt along with accrued interest as of that date, the \$175,000 final payment, a prepayment fee of \$30,000 and associated legal expenses to satisfy the Company’s obligation under the credit and security agreement.

In connection with the credit and security agreement dated January 3, 2013, the Company incurred total debt issuance costs of \$61,876. The Company was amortizing these debt issuance costs over the estimated term of the debt using the straight-line method. On March 31, 2015, the Company paid off the debt, including \$28,875 of debt issuance costs incurred.

Prior to the debt repayment, the term loan outstanding under the Company’s credit and security agreement with MidCap was reported at its carrying value in the accompanying consolidated balance sheets. The Company determined the fair value of the term loan using an income approach, utilizing a discounted cash flow analysis based on current market interest rates for debt issuances with similar remaining years to maturity, adjusted for credit risk. The term loan was valued using Level 2 inputs as of December 31, 2014. The result of the calculation yielded a fair value that approximated carrying value.

On August 4, 2015, the Company entered into a credit and security agreement with MidCap Financial Trust, as administrative agent, MidCap Financial Funding XIII Trust and Silicon Valley Bank, as lenders, (the “Lenders”), to borrow up to \$30,000,000 in term loans, (“2015 term loan”). The Company concurrently borrowed \$15,000,000 under an initial term loan. The remaining \$15,000,000 under the facility may be drawn down in the form of a second term loan at the Company’s option through September 2016, subject to the Company’s receipt of positive Phase 3 Zilretta clinical trial data meeting the trial’s primary endpoint which is sufficient to file a New Drug Application (NDA) for Zilretta, as well as other customary conditions for funding. The Company granted the Lenders a security interest in substantially all of its personal property, rights and assets, other than intellectual property, to secure the payment of all

amounts owed under the credit facility. The Company also agreed not to encumber any of its intellectual property without the Lenders' prior written consent. The Company must maintain a balance in cash or cash equivalents at Silicon Valley Bank equal to the principal balance of the loan plus 5 percent for so long as the Company maintains any cash or cash equivalents in non-secured bank accounts. The credit and security agreement also contains certain representations, warranties, and covenants of the Company, as well as a material adverse event clause. As of December 31, 2016, the Company was compliant with all covenants and there were no material adverse events.



On July 22, 2016, the Company borrowed the remaining \$15,000,000 under the credit and security agreement, in the form of a second term loan after receiving positive Phase 3 Zilretta clinical trial data meeting the trial's primary endpoint and which is sufficient to file an NDA for Zilretta. The second term loan is subject to the same credit terms as the initial term loan under the facility.

Borrowings under the credit facility accrue interest monthly at a fixed interest rate of 6.25% per annum. Following an interest-only period of 19 months, principal will be due in 36 equal monthly installments commencing March 1, 2017 and ending February 1, 2020 (the "maturity date"). Upon the maturity date, the Company will be obligated to pay a final payment equal to 9% of the total principal amounts borrowed under the facility. The final payment amount is being accreted to the carrying value of the debt using the effective interest rate method. As of December 31, 2016, the carrying value of the term loan was \$30,532,783 of which \$9,133,991 is classified as current portion of long-term debt and \$21,398,792 as long-term debt on the consolidated balance sheets as of December 31, 2016.

In connection with entering into a credit and security agreement dated August 4, 2015, the Company incurred debt acquisition costs of \$100,760.

The Company is amortizing these debt issuance costs over the estimated term of the debt using the straight-line method, which approximates the effective interest method. Total amortization expense of the debt issuance costs arising from the credit and security agreement dated August 4, 2015 was \$36,607 and \$12,228 for the year ended December 31, 2016 and 2015. Total amortization expense of the debt issuance costs associated with the credit and security agreement dated January 3, 2013 was \$16,500 for the year ended December 31, 2014.

As of December 31, 2016, annual payments due under the Company's 2015 term loan are as follows

	Aggregate
	Minimum
Year	Payments
2017	10,035,734
2018	11,082,176
2019	10,448,495
2020	4,383,475
Total	\$35,949,880
Less interest	(2,717,097 )
Less final payment	(2,700,000 )
Total	\$30,532,783

#### 10. Convertible Preferred Stock

As of December 31, 2013, the Company's Certificate of Incorporation, as amended, authorized the Company to issue 73,780,250 shares of preferred stock with a par value of \$0.001 per share. The Company issued Series A and Series B Convertible Preferred Stock (collectively, the "Convertible Preferred Stock"). Of the 73,780,250 authorized shares, 72,780,250 shares were issued; 55,043,464 of the issued shares were designated as Series A Convertible Preferred Stock ("Series A Preferred Stock") and 18,736,786 were designated as Series B Convertible Preferred Stock ("Series B

Preferred Stock”).

On February 18, 2014, the Company completed an initial public offering (“IPO”) of its common stock. In preparation for the IPO, the Company’s Board of Directors and stockholders approved a 1-for-8.13 reverse stock split of the Company’s common stock and a proportional adjustment to the existing conversion ratios for each series of Convertible Preferred Stock. On January 27, 2014, the Company and holders of a majority of the Company’s Series A Convertible Preferred Stock and Series B Convertible Preferred Stock entered into a Conversion, Amendment and Waiver Agreement. In connection with the closing of the IPO, all of the Company’s outstanding redeemable convertible preferred stock automatically converted to common stock as of February 18, 2014, resulting in an additional 8,952,057 shares of common stock of the Company becoming outstanding.

The following is a summary of the Company's Convertible Preferred Stock as of December 31, 2013:

December 31, 2013					
	Preferred				Common
	Preferred	Shares			Stock
	Shares	Issued and	Carrying	Liquidation	Issuable
	Authorized	Outstanding	Value	Preference	Upon
					Conversion
Series A Preferred Stock	55,043,464	55,043,464	\$54,917,735	\$55,043,464	6,770,411
Series B Preferred Stock	18,736,786	17,736,786	19,888,478	20,000,000	2,181,646
	73,780,250	72,780,250	\$74,806,213	\$75,043,464	8,952,057

The holders of the preferred stock had the following rights and preferences:

#### Voting Rights

The holders of preferred stock were entitled to vote, together with the holders of common stock, on all matters submitted to stockholders for a vote. Each preferred stockholder was entitled to the number of votes equal to the number of shares of common stock into which each preferred share is convertible at the time of such vote.

#### Liquidation and Conversion

The Company does not currently have any holders of securities with either liquidation preferences or conversion rights as the Company's has no shares of preferred stock issued or outstanding at December 31, 2016. Series A and Series B preferred stock issued prior to the closing of the Company's IPO on February 18, 2014 were converted into shares of common stock on a 0.123001-for-1 basis.

#### 11. Preferred Stock

On February 17, 2014, the Company filed an amended and restated Certificate of Incorporation (the "Restated Certificate") in connection with the closing of the Company's initial public offering. As of December 31, 2016, under the Restated Certificate, the Company is authorized to issue 10,000,000 shares of preferred stock with a par value of \$0.001 per share.

#### 12. Common Stock

Upon inception of the Company on November 5, 2007, the Company authorized 10,000,000 shares of common stock and issued 109 shares to the founders. In 2009, the Company amended its Certificate of Incorporation and authorized an additional 69,000,000 shares of common stock, \$0.001 par value, bringing the total number of shares of common stock authorized to 79,000,000. In 2012, the Company amended its Certificate of Incorporation and authorized an additional 15,000,000 shares of common stock, \$0.001 par value, bringing the total number of shares of common stock authorized to 94,000,000. In 2014, the Company amended its Certificate of Incorporation and authorized an additional 6,000,000 shares of common stock, \$0.001 par value, bringing the total number of shares of common stock authorized to 100,000,000.

On February 18, 2014, the Company completed an initial public offering (“IPO”) of its common stock, which resulted in the sale of 5,750,000 shares of common stock at a price to the public of \$13.00 per share, including shares sold pursuant to the exercise in full of the underwriters’ option to purchase additional shares. In connection with the closing of the IPO, all of the Company’s outstanding redeemable convertible preferred stock automatically converted to common stock as of February 18, 2014, resulting in an additional 8,952,057 shares of common stock of the Company becoming outstanding.

On December 17, 2014, the Company completed a follow-on public offering of its common stock, which resulted in the sale of 5,796,000 shares of the Company’s common stock at a price to the public of \$17.00 per share including shares sold pursuant to the exercise in full of the underwriters’ option to purchase additional shares.

On June 7, 2016, the Company completed a follow-on public offering of its common stock, which resulted in the sale of 5,900,000 shares of the Company's common stock at a price to the public of \$14.00 per share including shares sold pursuant to the exercise in full of the underwriters' option to purchase additional shares.

On November 15, 2016, the Company completed a follow-on public offering of its common stock, which resulted in the sale of 4,140,000 shares of the Company's common stock at a price to the public of \$18.00 per share including shares sold pursuant to the exercise in full of the underwriters' option to purchase additional shares.

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of the Company's stockholders. Common stockholders are entitled to receive dividends, as may be declared by the board of directors, if any, subject to the preferential dividend rights of any holders of Preferred Stock. As of December 31, 2016, no dividends have been declared.

### 13. Commitments and Contingencies

#### Operating Leases

In May 2013, the Company entered into a lease for office space in Burlington, Massachusetts. The lease is for a 42-month term with minimum monthly lease payments beginning at \$17,588 per month and escalating over the lease term. The Company provided a letter of credit to the lessor in the amount of \$98,000 as a security deposit pursuant to the lease agreement to secure its obligations under the lease. During 2015, this letter of credit was reduced to \$50,000 pursuant to the original lease agreement.

In July 2015 the Company entered into a first amendment to its existing lease for approximately 4,700 square feet of additional office space (the "Additional Space") in Burlington, Massachusetts, as well as approximately 6,700 square feet of temporary space to be leased prior to the delivery of the Additional Space (which is anticipated to be delivered on May 1, 2016). The amendment extended the term of the original lease through October 31, 2019, contemporaneous with the Additional Space, and also provided the Company with an option to lease an additional 5,400 square feet of office space (the "Option Space"). On September 30, 2015, the Company exercised its option for the Option Space. In addition, the Company has the option to extend the term of a portion or the entire lease space for one additional three-year period. The Company may terminate the amendment for convenience with nine months' notice upon the occurrence of certain events connected to its clinical stage programs. In addition to the base rent, the Company is also responsible for its share of operating expenses and real estate taxes.

On September 21, 2016 the Company entered into a second amendment to its existing lease for approximately 6,748 additional square feet of rented space located in Burlington, Massachusetts. The lease began October 1, 2016 and expires on October 31, 2017. During October 2016, the Company's lease payment for this additional space was \$18,300 in incremental rent. Beginning in November 2016, through October 2017, the Company's lease payments for the additional space will increase to \$19,000 per month in incremental rental cash outflow.

The Company incurred rent expense of \$668,350, \$373,202, and \$242,946 for the years ended December 31, 2016, 2015 and 2014, respectively.

Future minimum lease payments under the Company's lease obligations are as follows:

Aggregate

Minimum

Year	Payments
2017	924,806
2018	758,299
2019	647,106
Total	\$2,330,211

## Manufacturing and Supply Agreement with Patheon U.K. Limited

In July 2015, the Company and Patheon U.K. Limited (“Patheon”) entered into a Manufacturing and Supply Agreement (the “Manufacturing Agreement”) and Technical Transfer and Service Agreement (the “Technical Transfer Agreement”) for the manufacture of Zilretta, the Company’s lead program, which is an intra-articular (IA), extended-release steroid for the treatment of osteoarthritis.

Patheon has agreed in the Technical Transfer Agreement to undertake certain transfer activities and construction services needed to prepare Patheon’s United Kingdom facility for the commercial manufacture of Zilretta in dedicated manufacturing suites. The Company will provide Patheon with certain equipment and materials necessary to manufacture Zilretta and it will pay Patheon a monthly fee for such activities and reimburse Patheon for certain material, equipment and miscellaneous expenses and additional services.

The initial term of the Manufacturing Agreement is 10 years from approval by the U.S. Food and Drug Administration, or FDA, of the Patheon manufacturing suites for Zilretta. The Company will pay a monthly base fee to Patheon for the operation of the manufacturing suites and a per product fee for each vial based upon a forecast of commercial demand. The Company will also reimburse Patheon for purchases of materials and equipment made on its behalf, certain nominal expenses and additional services. The Manufacturing Agreement will remain in full effect unless and until it expires or is terminated. Upon termination of the Manufacturing Agreement (other than termination by Flexion in the event that Patheon does not meet the construction and manufacturing milestones or for a breach by Patheon), Flexion will be obligated to pay for the costs incurred by Patheon associated with the removal of our manufacturing equipment and for Patheon’s termination costs up to a capped amount.

Future minimum payments under the Company’s agreed obligations are as follows:

Year Ending December 31,	
2017	5,529,600
2018	6,266,880
2019	7,372,800
2020 and thereafter	44,236,800
Total	\$63,406,080

## Evonik Supply Agreement

In November 2016, the Company entered into a Supply Agreement with Evonik Corporation (“Evonik”) for the purchase of PLGA which is used in the manufacturing of potential clinical and commercial supply of Zilretta. Pursuant to the Supply Agreement, Flexion is obligated to submit rolling monthly forecasts to Evonik for PLGA supply, a portion of which will constitute binding orders. In addition, Flexion agreed to certain minimum purchase requirements, which decrease over time, and which do not apply (i) during periods in which Evonik is in material breach of the Supply Agreement or is unable to perform its obligations due to a force majeure event, (ii) with respect to orders that Evonik is unable to supply in excess of binding orders, (iii) for orders Evonik is unable to timely deliver or does not deliver conforming product and provides a credit for such order, or (iv) during an uncured material quality failure by Evonik. Flexion agreed to purchase PLGA batches at a specified price per gram in U.S. dollars, subject to adjustment from time to time, including due to changes in price indices and in the event the initial term of the Supply Agreement is extended. The total term of the agreement is five years. Upon termination of the Supply Agreement (other than termination due to the bankruptcy of either Evonik or Flexion) Flexion is obligated to pay the costs

associated with the binding supply forecast provided to Evonik. The Supply Agreement will renew for two successive two year terms upon mutual written consent by both parties.

#### Southwest Research Institute License Agreement

On July 25, 2014, the Company entered into an exclusive worldwide license agreement with Southwest Research Institute (“SwRI”) with respect to the use of SwRI’s proprietary microsphere manufacturing technologies for certain steroids formulated with PLGA, including Zilretta. Under the agreement, the paid an upfront fee of \$120,000 to SwRI. In February 2017, Flexion executed an agreement with SwRI to transfer manufacturing



equipment to SwRI in consideration for SwRI deeming the additional milestone payment to have been fully paid by Flexion.

#### 14. Stock-Based Compensation

##### 2013 Equity Incentive Plan

On January 27, 2014, the Company's stockholders approved the 2013 Equity Incentive Plan (the "2013 Plan"), which became effective on February 11, 2014, the date of execution of the underwriting agreement pursuant to which the Company's common stock was priced for its initial public offering. Prior to the effective date of the 2013 Plan, the Company granted stock-based awards pursuant to the 2009 Stock Incentive Plan (the "2009 Plan"), which had similar features to the 2013 Plan. The 2013 Plan provides for the grant of incentive stock options ("ISOs"), non-statutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation. Initially, the maximum number of shares of the Company's common stock that may be issued pursuant to stock awards under the 2013 Plan was 2,337,616, which is the sum of (i) 1,230,012 shares, plus (ii) the number of shares remaining available for grant under the 2009 Plan, plus (iii) any shares subject to outstanding stock options or other stock awards that would have otherwise returned to the 2009 Plan (such as upon the expiration or termination of a stock award prior to vesting). Additionally, the number of shares of common stock reserved for issuance under the 2013 Plan will automatically increase on January 1 of each year, beginning on January 1, 2015 and continuing through and including January 1, 2023, by 4% of the total number of shares of the Company's capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by the board of directors. The maximum number of shares that may be issued upon the exercise of ISOs under the 2013 Plan is 4,684,989 shares. As of December 31, 2016, there were 508,882 options outstanding under the 2009 Plan.

The Company currently grants stock-based awards pursuant to the 2013 Plan. As of December 31, 2016, 1,287,381 shares were available for future issuance under the 2013 Plan. Stock option vesting typically occurs over four years for employees and directors and is at the discretion of the board of directors. Options granted have a maximum term of up to 10 years. As of December 31, 2016, there were 2,759,593 options outstanding under the 2013 Plan.

##### Stock Options

During the years ended December 31, 2016, 2015 and 2014, the Company granted stock options for the purchase of 1,816,575, 657,250, and 727,575 shares of common stock, respectively, to certain employees and directors. The vesting conditions for most of these awards are time-based, and the awards typically vest 25% after one year and monthly thereafter for the next 36 months, except for annual option grants to non-employee directors of the Company whose initial grants vest 25% after one year and monthly thereafter for the next 24 months and whose annual grants vest in equal monthly installments during the 12-month period following the grant date, pursuant to the Company's Non-Employee Director Compensation Policy. Awards typically expire after 10 years.

Stock options for the purchase of 403,382 shares of common stock were granted in 2012; of these, 264,944 were granted with performance-based vesting conditions to certain executives. The options were to vest in the event of a corporate transaction with the amount to vest contingent upon the transaction. The grant date fair value of these options was \$236,940. In September 2012, performance-based options for the purchase of 18,450 shares of common stock were forfeited. No expense was recognized related to these options for the year ended December 31, 2012 as the performance conditions were not considered probable of achievement at December 31, 2012. On July 16, 2013, in

connection with the Company's proposed initial public offering, the board of directors exercised its election to change the vesting conditions of these stock options from performance-based vesting to time-based vesting. As a result, these stock options now vest over a four-year period commencing effective August 29, 2012. The change in the vesting conditions was accounted for as a modification of these stock options. The modification resulted in an aggregate increase in the fair value of the options of \$2,185,729, of which \$481,729 was recorded as stock-based compensation expense on the modification date, July 16, 2013, and \$1,704,000 was unrecognized stock-based compensation expense, which was recognized over the remaining vesting terms of the options through August 2016.

## Stock Option Valuation

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes option-pricing model. The Company historically has been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected stock volatility based on the historical volatility of its publicly-traded peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded stock price. The expected term of the Company's stock options has been determined utilizing the "simplified" method for awards that qualify as "plain vanilla" options. The expected term of stock options granted to non-employees is equal to the contractual term of the option award. The risk-free interest rate is determined by reference to the U.S. Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award. Expected dividend yield is based on the fact that the Company has never paid cash dividends and does not expect to pay any cash dividends in the foreseeable future. The relevant data used to determine the value of the stock option grants for the years ended December 31, 2016, 2015 and 2014 is as follows:

	December 31,		
	2016	2015	2014
Risk-free interest rates	0.74-1.75%	1.92%	1.54-2.04%
Expected dividend yield	0.00%	0.00%	0.00%
Expected term (in years)	5.6	6.0	6.0
Expected volatility	67.3-96.9%	83.9%	61.9-68.0%

The following table summarizes stock option activity for the year ended December 31, 2016:

	Shares Issuable	Weighted Average
(In thousands, except per share amounts)	Under Options	Exercise Price
Outstanding as of December 31, 2015	1,657	\$ 14.28
Granted	1,816	15.43
Exercised	(30 )	5.53
Cancelled	(175 )	17.22
Outstanding as of December 31, 2016	3,268	\$ 14.84
Options vested and expected to vest at December 31, 2016	2,275	\$ 14.47
Options exercisable at December 31, 2016	1,174	\$ 12.31

The aggregate intrinsic value of options is calculated as the difference between the exercise price of the options and the fair value of the Company's common stock for those options that had exercise prices lower than the fair value of the Company's common stock. A total of 30,195, 109,441, and, 141 options were exercised during the years ended December 31, 2016, 2015 and 2014, respectively. The aggregate intrinsic value of stock options exercised was \$236,889, \$1,584,657, and \$1,476,861 for the years ended December 31, 2016, 2015 and 2014, respectively.

At December 31, 2016, 2015 and 2014 the Company had options for the purchase of 3,268,475, 1,657,225, and 1,289,082 shares of common stock outstanding, with a weighted average remaining contractual term of 7.8, 7.9, and

8.1 years, respectively, and with a weighted average exercise price of \$14.84, \$14.28, and \$10.26 per share, respectively. At December 31, 2016, 2015 and 2014 there were options for the purchase of 1,173,671, 728,621, and 450,109 shares of common stock exercisable under these stock option awards, with a weighted average remaining contractual life of 6.7, 6.9, 6.7 years, respectively, and an aggregate intrinsic value of \$8,745,505, \$7,714,057, and 7,489,976, respectively.

The weighted average grant date fair value of options granted during the years ended December 31, 2016, 2015 and 2014 was \$11.50, \$15.08, and \$9.99, respectively.

#### Restricted Common Stock

The Company's 2013 Equity Incentive Plan provides for the award of restricted stock.

As of December 31, 2016 and 2015, there were no shares related to restricted stock awards that were unvested and subject to repurchase.

As of December 31, 2016 and 2015, there were no shares related to restricted stock awards that were unvested and subject to repurchase.

#### Stock-based Compensation

The Company recorded stock-based compensation expense related to stock options, restricted stock and shares purchased under the employee stock purchase plan for the years ended December 31, 2016, 2015 and 2014 as follows:

(In thousands)	Year Ended December 31,		
	2016	2015	2014
Research and development	\$2,340,847	\$1,412,153	\$684,511
General and administrative	4,428,957	3,170,526	1,766,068
	\$6,769,804	\$4,582,679	\$2,450,579

As of December 31, 2016, unrecognized stock-based compensation expense for stock options outstanding was \$15,932,348 which is expected to be recognized over a weighted average period of 3.04 years.

#### Restricted Stock Units

On January 4, 2016, the Company granted restricted common stock units with performance-based vesting conditions to certain executives. The restricted stock units vest, and the underlying shares of common stock become deliverable, in the event the Company receives approval from the U.S. Food and Drug Administration of a new drug application for Zilretta (the “Milestone”). Depending on when and if the Milestone is achieved, the maximum aggregate number of shares of the Company’s common stock available to be earned under the awards is 189,300 with an approximate value of \$3,997,371 as of the grant date. If the Milestone is not achieved prior to July 1, 2018, the awards will not vest, will be forfeited in their entirety and no shares of common stock will be delivered. Since it is not possible for the Company to determine the probability of the performance condition being achieved, no compensation costs will be recorded until the Milestone is achieved. If the Milestone is achieved prior to the termination date, a portion of the compensation cost will be recognized immediately on the milestone achievement date based on the proportion of the service period elapsed as of that date, with the remaining compensation cost recognized over the remaining two year service period.

#### Employee Stock Purchase Plan

On January 27, 2014, the Company's stockholders approved the Employee Stock Purchase Plan. A total of 209,102 shares of common stock were reserved for issuance under this plan. The Employee Stock Purchase Plan became effective on February 11, 2014, the date of execution of the underwriting agreement pursuant to which the Company's common stock was priced for its initial public offering. During the year ended December 31, 2016 and 2015, 26,880 and 20,896 shares, respectively, were purchased by employees under the plan. Additionally, the number of shares of common stock reserved for issuance under the Employee Stock Purchase Plan will automatically increase on January 1 of each year, beginning on January 1, 2015 and continuing through and including January 1, 2023, by 1% of the total number of shares of the Company's capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by the board of directors.

## 15. Net Loss Per Share

Basic and diluted net loss per share attributable to common stockholders was calculated as follows for the years ended December 31, 2016, 2015 and 2014:

(In thousands)	Year ended December 31,		
	2016	2015	2014
<b>Numerator:</b>			
Net loss	\$(71,893,959)	\$(46,315,451)	\$(27,313,664)
Net loss:	\$(71,893,959)	\$(46,315,451)	\$(27,313,664)
<b>Denominator:</b>			
Weighted average common shares outstanding, basic			
and diluted	25,296,527	21,497,119	13,893,961
Net loss per share, basic and diluted	\$(2.84	) \$(2.15	) \$(1.97

Stock options for the purchase of 2,532,675, 1,655,394, and 1,185,253 weighted average shares of common stock were excluded from the computation of diluted net loss per share attributable to common stockholders for the years ended December 31, 2016, 2015 and 2014, respectively, because those options had an anti-dilutive impact due to the net loss attributable to common stockholders incurred for those periods.

## 16. Income Taxes

The Company has generated losses since inception. Accordingly, there is no tax provision or benefit for the years ended December 31, 2016, and 2015, respectively other than \$14,267 related to federal tax on the Company's Security Corporation.

A reconciliation of the U.S. federal statutory income tax rate to the Company's effective income tax rate is as follows:

	Year Ended December 31,		
	2016	2015	2014
Federal statutory income tax rate	34.0 %	34.0 %	34.0 %
State taxes, net of federal benefit	5.0	4.9	4.7
Federal and state research and development tax credits	2.7	4.7	3.5
Change in deferred tax asset valuation allowance	(40.0)	(45.4)	(37.8)
Other	(1.7 )	1.8	(4.4 )
Effective income tax rate	— %	— %	— %

The Company's net deferred tax assets consisted of the following:

	December 31,	
	2016	2015
Net operating loss carryforwards	\$36,880,381	\$24,226,949
Research and development tax credit carryforwards	7,077,546	5,368,524
Accruals and other temporary differences	4,896,980	2,339,444
Capitalized research and development expenses, net	34,579,391	22,838,452
Total deferred tax assets	83,434,298	54,773,369
Valuation allowance	(83,434,298)	(54,773,369)
Net deferred tax asset	\$—	\$—

As of December 31, 2016, the Company had federal and state net operating loss carryforwards of approximately \$94,659,000 and \$88,945,478, respectively, which begin to expire in 2029 for federal purposes and in 2030 for state purposes. In addition, the Company had federal and state research and development tax credit carryforwards of approximately \$5,202,362 and \$2,841,187, respectively, available to reduce future tax liabilities,



which begin to expire in 2029 for federal purposes and 2025 for state purposes. Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of net operating loss carryforwards and capitalized research and development expenses. Management has considered the Company's history of cumulative net losses incurred since inception, as well as its lack of commercialization of any products or generation of any revenue from product sales since inception, and determined that it is more likely than not that the Company will not realize the benefits of its deferred tax assets. As a result, a full valuation allowance has been established at December 31, 2016 and 2015.

Section 382 of the Internal Revenue Code of 1986, as amended ("Section 382"), contains rules that limit the ability of a company that undergoes an ownership change to utilize its net operating losses ("NOLs") and tax credits existing as of the date of such ownership change. Under the rules, such an ownership change is generally any change in ownership of more than 50% of a company's stock within a rolling three-year period. The rules generally operate by focusing on changes in ownership among stockholders considered by the rules as owning, directly or indirectly, 5% or more of the stock of a company and any change in ownership arising from new issuances of stock by the company. During the quarter ended June 30, 2014, the Company completed a Section 382 study through February 11, 2014. The results of this study showed that as of February 11, 2014, one historical ownership change within the meaning of section 382 had occurred in 2009.

In addition, the company further updated its existing section 382 study through June 8, 2015. The results of this study showed that as of June 8, 2015, one additional historical ownership change within the meaning of section 382 took place. The company believes that none of its NOLs will expire as a result of these identified changes in ownership, assuming sufficient future taxable income and no future limitations. Subsequent ownership changes as defined by section 382 may potentially limit the amount of net operating loss carry forward that could be utilized annually to offset future taxable income. The company has generated losses since inception and therefore has recorded no income tax benefits for those losses due to its uncertainty of realizing a benefit from those losses.

During the quarter ended September 30, 2016, the Company completed a Section 382 study through June 30, 2016. The results of this study showed that one historical ownership change within the meaning of Section 382 had occurred on June 8, 2016 in connection with the Company's 2016 offering. Although a Section 382 change in ownership has occurred, it is not currently anticipated that a portion of the Company's NOLs will expire unutilized as a result of this Section 382 limitation. Any subsequent ownership changes as defined by Section 382 may potentially limit the amount of our NOL carryforwards that could be utilized annually to offset any future taxable income. The Company has generated losses since inception and therefore has recorded no income tax benefits for those losses due to its uncertainty of realizing a benefit from those losses.

Changes in the valuation allowance for deferred tax assets during the years ended December 31, 2016 and 2015 were as follows:

	Year Ended December 31,		
	2016	2015	2014
Valuation allowance as of beginning of year	\$(54,773,369)	\$(33,825,873)	\$(23,493,416)
Decreases recorded as benefit to income tax provision	4,771,490	2,857,886	2,020,565
Increases recorded to income tax provision	(33,432,419)	(23,805,382)	(12,353,022)
Valuation allowance as of end of year	\$(83,434,298)	\$(54,773,369)	\$(33,825,873)

In each reporting period, the Company considers whether a tax position of the Company is more likely than not to be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. For tax positions meeting the more likely than not threshold, the tax amount recognized in the financial statements is reduced by the largest benefit that has a greater than fifty percent likelihood of being realized upon the ultimate settlement with the relevant taxing authority. No liabilities for unrecognized tax benefits were recorded as of December 31, 2016 and 2015.

The Company files tax returns as prescribed by the tax laws of the jurisdictions in which it operates. In the normal course of business, the Company is subject to examination by federal and state jurisdictions, where applicable. There are currently no pending tax examinations. The Company's tax years are still open under statute

from 2013 to the present. Earlier years may be examined to the extent that tax credit or net operating loss carryforwards are used in future periods. The resolution of tax matters is not expected to have a material effect on the Company's consolidated financial statements.

#### 17. Quarterly Financial Data (unaudited)

The following information has been derived from unaudited consolidated financial statements that, in the opinion of management, include all recurring adjustments necessary for a fair statement of such information.

	Three Months Ended			
	March 31, 2016	June 30, 2016	September 30, 2016	December 31, 2016
Operating expenses	\$16,673	\$14,120	\$ 17,435	\$ 21,552
Net loss	(16,815)	(14,185)	(17,782 )	(23,112 )
Net loss per common share—basic and diluted	\$(0.78 )	\$(0.63 )	\$ (0.65 )	\$ (0.79 )
Weighted average common shares—basic and diluted	21,570	22,666	27,524	29,347

	Three Months Ended			
	March 31, 2015	June 30, 2015	September 30, 2015	December 31, 2015
Operating expenses	\$9,015	\$12,544	\$ 11,026	\$ 13,479
Net loss	(9,174 )	(12,437)	(11,136 )	(13,569 )
Net loss per common share—basic and diluted	\$(0.43 )	\$(0.58 )	\$ (0.52 )	\$ (0.63 )
Weighted average common shares—basic and diluted	21,451	21,475	21,507	21,554

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure  
None.

Item 9A. Controls and Procedures  
Evaluation of Disclosure Controls and Procedures

We are responsible for maintaining disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Disclosure controls and procedures are controls and other procedures designed to ensure that the information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive officer and our principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Based on our management's evaluation (with the participation of our principal executive officer and our principal financial officer) of our disclosure controls and procedures as required by Rules 13a-15(e) and Rule 15d-15(e) under the Exchange Act, our principal executive officer and our principal financial officer have concluded that our disclosure controls and procedures were effective to achieve their stated purpose as of December 31, 2016, the end of the period covered by this report.

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 Rule 13a-15(f). Internal control over financial reporting is a process designed under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

As of December 31, 2016, our management assessed the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework (2013 Framework). Based on this assessment, our management concluded that, as of December 31, 2016, our internal control over financial reporting was effective based on those criteria. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

This annual report does not include an attestation report of our registered public accounting firm due to a transition period established by the JOBS Act for emerging growth companies.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

We expect that our 2017 annual meeting of stockholders, or the Annual Meeting, will be held on or about June 15, 2017. To be considered for inclusion in the Company's proxy materials for the Annual Meeting, stockholder proposals must be submitted in writing between the date of this Annual Report and April 19, 2017, to the attention of the

Secretary of Flexion Therapeutics, Inc. at 10 Mall Road, Suite 301, Burlington, Massachusetts 01803. If stockholders wish to submit a proposal (including a director nomination) at the Annual Meeting that is not

to be included in our proxy materials for the Annual Meeting, the written request must be received by the Secretary of Flexion Therapeutics, Inc. no later than the close of business on April 19, 2017. Stockholders are also advised to review our Bylaws, which contain additional requirements about advance notice of stockholder proposals and director nominations.

### PART III

#### Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item and not set forth below will be set forth in the section headed “Election of Directors” and “Executive Officers” in our Proxy Statement for our 2017 Annual Meeting of Stockholders, or Proxy Statement, to be filed with the SEC within 120 days after the end of the fiscal year ended December 31, 2016, and is incorporated herein by reference.

We have adopted a written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A current copy of the code is available on the Corporate Governance section of our website, [www.flexiontherapeutics.com](http://www.flexiontherapeutics.com). We intend to disclose on our website any amendments to, or waivers from, our code of business conduct and ethics that are required to be disclosed pursuant to SEC rules.

#### Item 11. Executive Compensation

The information required by this item will be set forth in the section headed “Executive Compensation” in our Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be set forth in the section headed “Security Ownership of Certain Beneficial Owners and Management” in our Proxy Statement and is incorporated herein by reference.

The information required by Item 201(d) of Regulation S-K will be set forth in the section headed “Executive Compensation” in our Proxy Statement and is incorporated herein by reference.

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

The information required by this item will be set forth in the section headed “Transactions With Related Persons” in our Proxy Statement and is incorporated herein by reference.

#### Item 14. Principal Accounting Fees and Services

The information required by this item will be set forth in the section headed “Ratification of Selection of Independent Registered Public Accounting Firm” in our Proxy Statement and is incorporated herein by reference.

## PART IV

### Item 15. Exhibits, Financial Statement Schedules

(a) Documents filed as part of this report.

#### 1. Financial Statements

The financial statements of Flexion Therapeutics, Inc. listed below are set forth in Item 8 of this report for the year ended December 31, 2016:

<u>Report of Independent Registered Public Accounting Firm</u>	Page 74
<u>Consolidated Balance Sheets</u>	75
<u>Consolidated Statements of Operations and Comprehensive Loss</u>	76
<u>Consolidated Statements of Changes in Convertible Preferred Stock and Stockholders' Equity (Deficit)</u>	77
<u>Consolidated Statements of Cash Flows</u>	78
<u>Notes to Consolidated Financial Statements</u>	79

#### 2. Financial Statement Schedules

These schedules have been omitted because the required information is included in the consolidated financial statements or notes thereto or because they are not applicable or not required.

#### 3. Exhibits

For a list of exhibits filed with this Annual Report on Form 10-K, refer to the exhibit index. Each management contract or compensatory plan or arrangement required to be identified by this item is so designated in such list.



## 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 on the 10<sup>th</sup> day of March, 2017.

FLEXION THERAPEUTICS, INC.

By: /s/ Michael D. Clayman, M.D.  
Michael D. Clayman, M.D.  
President and Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael D. Clayman, M.D. and Frederick W. Driscoll, and each of them, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this report, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, or their or his substitutes or 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/ Michael D. Clayman, M.D. Michael D. Clayman, M.D.	President, Chief Executive Officer and Member of the Board of Directors (Principal Executive Officer)	March 10, 2017
/s/ Frederick W. Driscoll Frederick W. Driscoll	Chief Financial Officer (Principal Financial and Accounting Officer)	March 10, 2017
/s/ Patrick J. Mahaffy Patrick J. Mahaffy	Chairman of the Board of Directors	March 10, 2017
/s/ Scott Canute	Member of the Board of Directors	March 10, 2017

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Scott Canute

/s/ Samuel D. Colella Samuel D. Colella	Member of the Board of Directors	March 10, 2017
/s/ Heath Lukatch, Ph.D. Heath Lukatch, Ph.D.	Member of the Board of Directors	March 10, 2017
/s/ Sandesh Mahatme Sandesh Mahatme	Member of the Board of Directors	March 10, 2017
/s/ Ann Merrifield Ann Merrifield	Member of the Board of Directors	March 10, 2017
/s/ Alan Milinazzo Alan Milinazzo	Member of the Board of Directors	March 10, 2017
/s/Mark Stejbach Mark Stejbach	Member of the Board of Directors	March 10, 2017

## EXHIBIT INDEX

Unless otherwise indicated, all references to previously filed Exhibits refer to Flexion's filings with the Securities and Exchange Commission, or SEC, under File No. 001-36287. Any Exhibit that was not previously filed is filed herewith.

### Exhibit

### Number Description

2017

- 3.1 Amended and Restated Certificate of Incorporation of Flexion (Exhibit 3.1, Current Report on Form 8-K filed on February 19, 2014)
- 3.2 Amended and Restated Bylaws of Flexion (Exhibit 3.2, Current Report on Form 8-K filed on February 19, 2014)
- 4.1 Form of Common Stock Certificate of Flexion (Exhibit 4.1, Registration Statement on Form S-1 (File No. 333-193233), as amended, filed on January 29, 2014)
- 4.2 Amended and Restated Investor Rights Agreement, dated December 3, 2012, between Flexion and certain of its stockholders (Exhibit 4.2, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
- 4.3 Conversion, Amendment and Waiver Agreement, dated January 27, 2014, between Flexion and certain of its stockholders (Exhibit 4.3, Registration Statement on Form S-1 (File No. 333-193233), as amended, filed on January 29, 2014)

### Management Contracts and Compensatory Plans

- 10.1 Form of Indemnity Agreement between Flexion and its directors and officers (Exhibit 10.1, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
- 10.2 Flexion Therapeutics, Inc. 2009 Equity Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder (Exhibit 10.2, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
- 10.3 Flexion Therapeutics, Inc. 2013 Equity Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder (Exhibit 10.3, Registration Statement on Form S-1 (File No. 333-193233), as amended, filed on January 29, 2014)
- 10.4 Form of Restricted Stock Unit Award Agreement and Restricted Stock Unit Grant Notice under the Flexion Therapeutics, Inc. 2013 Equity Incentive Plan (Exhibit 99.1, Current Report on Form 8-K filed on December 22, 2015)

10.5

## Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Flexion Therapeutics, Inc. 2013 Employee Stock Purchase Plan (Exhibit 10.4, Registration Statement on Form S-1 (File No. 333-193233), as amended, filed on January 29, 2014)

- 10.6 Flexion Therapeutics, Inc. Non-Employee Director Compensation Policy, as revised (Exhibit 10.6, Annual Report on Form 10-K filed on March 11, 2016)
  - 10.7 Amended and Restated Offer Letter between Flexion and Michael D. Clayman, M.D. (Exhibit 10.6, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
  - 10.8 Amendment to Amended and Restated Offer Letter between Flexion and Michael D. Clayman, M.D. (Exhibit 10.7, Annual Report on Form 10-K filed on March 28, 2014)
  - 10.9 Amended and Restated Offer Letter between Flexion and Neil Bodick, M.D., Ph.D. (Exhibit 10.7, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
  - 10.10 Amendment to Amended and Restated Offer Letter between Flexion and Neil Bodick, M.D., Ph.D. (Exhibit 10.9, Annual Report on Form 10-K filed on March 28, 2014)
-

Exhibit

Number Description

- 10.11 Amended and Restated Offer Letter between Flexion and Fred Driscoll (Exhibit 10.9, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
- 10.12 Amendment to Amended and Restated Offer Letter between Flexion and Fred Driscoll (Exhibit 10.11, Annual Report on Form 10-K filed on March 28, 2014)
- 10.13 Flexion Therapeutics, Inc. Change in Control Bonus Plan (Exhibit 99.1, Current Report on Form 8-K filed on September 2, 2014)

Other Agreements

- 10.14\* Out-License Agreement, dated June 12, 2009, between Flexion (as successor in interest to Flexion Therapeutics AG) and AstraZeneca AB (Exhibit 10.10, Registration Statement on Form S-1 (File No. 333-193233), as amended, filed on January 29, 2014)
- 10.15\* Letter Agreement, dated December 3, 2012, between Flexion and AstraZeneca AB (Exhibit 10.12, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
- 10.16\* Out-License Agreement, dated September 3, 2010, between Flexion and AstraZeneca AB (Exhibit 10.11, Registration Statement on Form S-1 (File No. 333-193233), as amended, filed on January 29, 2014)
- 10.17\* Letter Agreement, dated March 17, 2014, between Flexion and AstraZeneca AB (Exhibit 10.7, Quarterly Report on Form 10-Q filed on May 12, 2014)
- 10.18 Lease, dated February 22, 2013, between Flexion and The Trustees of Mall Road Trust (Exhibit 10.14, Registration Statement on Form S-1 (File No. 333-193233) filed on January 8, 2014)
- 10.19 First Amendment of Lease, dated July 13, 2015, between Flexion and CIP II/RJK 10-20 BMR Owner, LLC (as successor in interest to The Trustees of Mall Road Trust) (Exhibit 10.3, Quarterly Report on Form 10-Q filed on November 9, 2015)
- 10.20 Second Amendment of Lease, dated December 15, 2015, between Flexion and CIP II/RJK 10-20 BMR Owner, LLC (Exhibit 10.20, Annual Report on Form 10-K filed on March 11, 2016)
- 10.21\* Exclusive License Agreement, dated July 25, 2014, between Flexion and Southwest Research Institute (Exhibit 10.21, Annual Report on Form 10-K filed on March 11, 2016)
- 10.22\* Manufacturing and Supply Agreement, dated July 31, 2015, between Flexion and Patheon UK Limited (Exhibit 10.1, Quarterly Report on Form 10-Q filed on November 9, 2015)
- 10.23\* Technical Transfer and Service Agreement, dated July 31, 2015, between Flexion and Patheon UK Limited (Exhibit 10.2, Quarterly Report on Form 10-Q/A filed on January 26, 2016)
- 10.24 Credit and Security Agreement, dated August 4, 2015, between Flexion and MidCap Financial Trust, as administrative agent, and the Lenders listed on the Credit Facility Schedule attached thereto (Exhibit 10.4,

Edgar Filing: Flexion Therapeutics Inc - Form 10-K

Quarterly Report on Form 10-Q filed on November 9, 2015)

- 10.25 Third Amendment of Lease, dated May 8, 2016, between Flexion and CIP II/RJK 10-20 BMR Owner, LLC (Exhibit 10.1, Quarterly Report on Form 10-Q filed on August 3, 2016)
  - 10.26 Fourth Amendment of Lease, dated June 29, 2016, between Flexion and CIP II/RJK 10-20 BMR Owner, LLC (Exhibit 10.2, Quarterly Report on Form 10-Q filed August 3, 2016)
  - 10.27 Fifth Amendment of Lease, dated July 21, 2016, between Flexion and CIP II/RJK 10-20 BMR Owner, LLC (Exhibit 10.3, Quarterly Report on Form 10-Q filed August 3, 2016)
  - 10.28 Sixth Amendment of Lease, dated September 21, 2016, between Flexion and CIP II/RJK 10-20 BMR Owner, LLC (Exhibit 10.1, Quarterly Report on Form 10-Q filed on November 7, 2016)
  - 10.29 Supply Agreement, dated November 10, 2016, between Flexion and Evonik Corporation
-

Exhibit

Number	Description
10.30	Amendment to Exclusive License Agreement, dated February 7, 2017, between Flexion and Southwest Research Institute (Exhibit 10.30, Annual Report on Form 10-K filed on March 10, 2017)
21.1	Subsidiaries of Flexion Therapeutics, Inc.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
24.1	Power of Attorney (reference is made to the signature page thereto)
31.1	Certification of the Principal Executive Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934
31.2	Certification of the Principal Financial Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities Exchange Act of 1934
32.1	Certification of Principal Executive Officer pursuant to Rule 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350
32.2	Certification of Principal Financial Officer pursuant to Rule 13a-14(b) or 15d-14(b) of the Exchange Act and 18 U.S.C. Section 1350
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

+Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.

\*Confidential treatment has been granted with respect to certain portions of this exhibit. Omitted portions have been filed separately with the SEC.