AKORN INC
Form 10-K
March 01, 2019

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
Form 10-K
þ Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2018

o Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934
Commission File Number: 001-32360
AKORN, INC.
(Exact name of registrant as specified in its charter)

LOUISIANA	72-0717400
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1925 W. Field Court, Suite 300, Lake Forest, Illinois 60045
(Address of principal executive offices and zip code)
Registrant's telephone number, including area code: (847) 279-6100
SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of each class	Name of each exchange on which registered
Common Stock, No Par Value	The NASDAQ Global Select Market

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT:
(None)
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes þ No o
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ
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 þ No o
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes þ No o
Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act. (check one):

Large accelerated filer þ	Accelerated filer o
Non-accelerated filer o	Smaller reporting

(Do not check if a smaller reporting company) company o

Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

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

The aggregate market value of the voting stock of the registrant held by non-affiliates (affiliates being, for these purposes only, directors, executive officers and holders of more than 5% of the registrant's common stock) of the registrant as of June 30, 2018 was approximately $1,106.7 million based on the closing market price of $16.59 reported on the NASDAQ Global Select Market.

The number of shares of the registrant's common stock, no par value per share, outstanding as of February 20, 2019 was 125,577,671.

Cautionary Statement Regarding Forward-Looking Statements

Unless otherwise indicated or except where the context otherwise requires, the terms "we," "us" and "our" or other similar terms in this Annual Report on Form 10-K refer to Akorn, Inc. and its wholly-owned subsidiaries.

Certain statements in this Form 10-K are forward-looking in nature and are intended to be "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to future events or future financial performance. In some cases, you can identify forward-looking statements by terminology such as "may," "should," "will," "would," "could," "expects," "plans," "intends," "anticipates," "believes," "estimates," "predicts," "po or the negative of such terms or other comparable terminology. Any forward-looking statements, including statements regarding our intent, beliefs or expectations are not guarantees of future performance. These statements are subject to risks and uncertainties and actual results, levels of activity, performance or achievements and may differ materially from those in the forward-looking statements as a result of various factors. See "Item 1A - Risk Factors." As a result, you should not place undue reliance on any forward-looking statements. You should read this report completely with the understanding that our actual results may differ materially from what we expect. Unless required by law, we undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise.

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PART I

Item 1. Business

Akorn, Inc., together with its wholly-owned subsidiaries (collectively "Akorn," the "Company," "we," "our" or "us") is a specialty generic pharmaceutical company that develops, manufactures and markets generic and branded prescription pharmaceuticals, branded as well as private-label over-the-counter consumer health products and animal health pharmaceuticals. We are an industry leader in the development, manufacturing and marketing of specialized generic pharmaceutical products in alternative dosage forms. We focus on difficult-to-manufacture sterile and non-sterile dosage forms including, but not limited to, ophthalmics, injectables, oral liquids, otics, topicals, inhalants and nasal sprays. In previous years, the Company completed numerous mergers, acquisitions, product acquisitions, which resulted in significant growth.

Akorn is a Louisiana corporation founded in 1971 in Abita Springs, Louisiana. In 1997, we relocated our corporate headquarters to the Chicago, Illinois area and currently maintain our principal corporate offices in Lake Forest, Illinois. We operate pharmaceutical manufacturing facilities in Decatur, Illinois; Somerset, New Jersey; Amityville, New York; Hettlingen, Switzerland; and Paonta Sahib, Himachal Pradesh, India. We operate a central distribution warehouse in Gurnee, Illinois and additional distribution facilities in Amityville, New York and Decatur, Illinois. Our research and development ("R&D") centers are located in Vernon Hills, Illinois and Cranbury, New Jersey. We maintain other corporate offices in Ann Arbor, Michigan and Gurgaon, Haryana, India.

During the years ended December 31, 2018, 2017 and 2016, the Company reported results for two reportable segments: Prescription Pharmaceuticals and Consumer Health. For further detail concerning our reportable segments please see Part II, Item 8, Note 12 - "Segment Information."

Our common shares are traded on The NASDAQ Global Select Market under the ticker symbol AKRX. Our principal corporate office is located at 1925 West Field Court Suite 300, Lake Forest, Illinois 60045 with telephone number (847) 279-6100.

Our Strategy

Our strategy is focused on continuing to strengthen our position in the development and marketing of specialized generic and branded pharmaceuticals, over-the-counter ("OTC") drug products and animal health products. We endeavor to maximize shareholder value by quickly adapting to market conditions, patient demands and customer needs.

We strive to improve cash flow and profitability and generate growth through: new product launches resulting from research and development successes, improving operational execution, improving and optimizing our cash flow and leveraging our customer relationships and market leadership. We remain committed to research and development with a focus on our core product areas of ophthalmics, injectables, oral liquids, otics, topicals, inhalants and nasal sprays.

Additionally, where possible we seek to grow our business inorganically through strategic mergers, acquisitions, business development and licensing activities that provide the ability to move into new product areas or to expand our reach in existing product areas.

Our Competitive Strengths

In order to successfully execute our strategy, we must continue to capitalize on our core strengths:

Research and development expertise in alternative dosage forms. Our R&D efforts are primarily focused on the development of multisource generic products that are in dosage forms other than oral solid dose. We consider dosage forms outside of oral solid dose to be “alternative dosage forms.” These products typically have fewer competitors in mature markets, are more difficult to develop and manufacture and can carry higher profitability over time than oral solid dose products. The alternative dosage form products that we focus on are primarily those that we can manufacture, namely: ophthalmics, injectables, oral liquids, otics, topicals, inhalants and nasal sprays.

Alternative dosage form manufacturing expertise. Our manufacturing network specializes in alternative dosage form products. Four of our five manufacturing facilities are U.S. Food and Drug Administration (“FDA”) approved, including:

(1) Our Decatur, Illinois facility, which specializes in sterile products, primarily injectables;
(2) Our Somerset, New Jersey facility, which specializes primarily in sterile ophthalmic products;

(3) Our Amityville, New York facility, which specializes in topical creams, gels and ointments, oral liquids, otic liquids, nasal sprays, sterile ophthalmic products and unit dose oral liquid products; and
(4) Our Hettlingen, Switzerland facility, which specializes primarily in sterile ophthalmic products.

Our Paonta Sahib, Himachal Pradesh, India manufacturing facility is not yet FDA approved. The Paonta Sahib facility is a sterile injectable facility with separate areas dedicated to general injectable products, carbapenem injectable products, cephalosporin injectable products and hormonal injectable products. On February 25, 2019, the Company made a decision to explore strategic alternatives for exiting our Paonta Sahib, Himachal Pradesh, India manufacturing facility.

Established portfolio of generic, branded, OTC and animal health products. We market a diverse portfolio of generic prescription pharmaceutical products, branded prescription pharmaceutical products, OTC brands, various private-label OTC pharmaceutical products and a number of prescription animal health products. For our human prescription products, our diverse portfolio of alternative dosage form products sets us apart from our larger competitors and allows us to provide a single source of these products for our customers. Our OTC and animal health portfolios are largely complementary to our human prescription products, allowing us to leverage our manufacturing and marketing expertise.

Targeted sales and marketing infrastructure. We maintain a targeted sales and marketing infrastructure to promote our branded, generic, OTC and animal health products. We leverage our sales and marketing infrastructure to not only promote our branded portfolio, but also to sell our multisource generic products directly into physician offices, hospital systems and group purchasing organizations.

Significant management expertise. Our senior management team has a demonstrated track record of building and operating pharmaceutical companies through product development, in-licensing and acquisitions.

Our Areas of Focus

Alternative dosage form generics. Our core area of focus is generic prescription pharmaceutical products in alternative dosage forms. We market a portfolio of multisource prescription pharmaceutical products in injectable, ophthalmic, topical, oral and inhaled liquid, nasal spray and otic dosage forms. We also market select oral solid dose formulations.

Specialty brands. Alongside our generic prescription pharmaceutical products, we market a portfolio of branded prescription pharmaceutical products, primarily in the ophthalmology area. While we continue to focus primarily on generic products, our branded portfolio allows us to leverage our sales and manufacturing infrastructure and deepen our relationships with customers.

OTC products. Our Akorn Consumer Health division (“ACH”) markets a portfolio of OTC brands and various formulations of private-label OTC pharmaceutical products. Our flagship OTC brand is TheraTears® Therapy for Your Eyes®, which is a family of therapeutic eye care products including dry eye therapy lubricating eye drops, eyelid and eyelash cleansing foam and eye nutrition supplements. We also market several specialty OTC products including, Zostrix®, MagOx®, Maginex®, Multi-betic® and Diabetic Tussin®.

Specialized Animal Health Products. We market a portfolio of branded and generic companion animal prescription pharmaceutical products under the Akorn Animal Health label. Our major animal health products include Anased® and VetaKet®, veterinary sedatives; Tolazine® and Yobine®, sedative reversing agents; and Butorphic®, a pain reliever.

New Product Development

We seek to continually grow our business by developing new products. Internal R&D projects are carried out at our R&D facilities located in Vernon Hills, Illinois and Cranbury, New Jersey. The majority of our product development activity takes place at our R&D facilities, while our manufacturing facilities provide support for the later phases of product development and exhibit batch production. We believe that having our own dedicated R&D facilities allows us to increase the size of our product pipeline and shorten the time between project start and filing with the FDA. As of December 31, 2018, we had 139 full-time employees directly involved in product R&D activities.

In addition to our internal development work, we strategically partner with drug development and contract manufacturing companies ("CMOs") throughout the world for the development of drug products that we believe will complement our existing product offerings, but for which we may lack the expertise to develop, or the capability, capacity or cost-efficiencies to manufacture. We may owe payments to these partners from time to time based on their achievement of certain milestones, such as filing and launch of the subject development product. Our development partners are typically responsible for manufacturing or sourcing of the finished product and may receive a royalty or a profit split from the sales of the product, or milestone payments.

R&D costs are expensed as incurred. Such costs amounted to $47.3 million, $45.0 million and $38.8 million for the years ended December 31, 2018, 2017 and 2016, respectively. This includes internal and external R&D expenses and milestone fees paid to our strategic partners.

During the year ended December 31, 2018, we submitted two new Abbreviated New Drug Application (“ANDA”) filings to the FDA. In the prior year ended December 31, 2017, we submitted five ANDA filings while in 2016 we submitted 12 ANDA filings and three Abbreviated New Animal Drug Application (“ANADA”) filings to the FDA.

Akorn and its partners received eight ANDA product approvals from the FDA in the year ended December 31, 2018; 26 ANDA approvals and one New Drug Application (“NDA”) approval in 2017 and finally, seven ANDA approvals and three tentative ANDA approvals in 2016.

As of December 31, 2018, we had 62 ANDA filings under FDA review. We plan to continue to regularly submit additional filings based on perceived market opportunities and our R&D pipeline, as well as review existing filings for commercial viability.

See “Government Regulation” and Item 1A - Risk Factors — “Our growth depends on our ability to timely and efficiently develop and successfully launch and market new pharmaceutical products.”

Strategic Mergers and Acquisitions

We regularly evaluate and, where appropriate, execute opportunities to expand through the acquisition of products and companies in areas that we believe offer attractive opportunities for growth. Below is a summary of recent strategic merger and acquisition activity. See Item 1A - Risk Factors for a description of risks that accompany our business and acquisitions.

Fresenius Kabi AG. On April 24, 2017, the Company entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Fresenius Kabi AG, a German stock corporation (“Parent”), Quercus Acquisition, Inc., a Louisiana corporation and wholly-owned subsidiary of Parent (“Merger Sub”) and, solely for purposes of Article VIII thereof, Fresenius SE & Co. KGaA, a German partnership limited by shares.

On April 22, 2018, Fresenius Kabi AG delivered to Akorn a letter purporting to terminate the Merger Agreement. On April 23, 2018, Akorn filed a verified complaint entitled Akorn, Inc. v. Fresenius Kabi AG, Quercus Acquisition, Inc. and Fresenius SE & Co. KGaA, in the Court of Chancery of the State of Delaware for breach of contract and declaratory judgment. The complaint alleged, among other things, that (i) the defendants anticipatorily breached their obligations under the Merger Agreement by repudiating their obligation to close the Merger, (ii) the defendants knowingly and intentionally breached their obligations under the Merger Agreement by working to slow the antitrust approval process and by engaging in a series of actions designed to hamper and ultimately block the Merger and (iii) Akorn had performed its obligations under the Merger Agreement, and was ready, willing and able to close the Merger. The complaint sought, among other things, a declaration that Fresenius Kabi AG's termination was invalid, an order enjoining the defendants from terminating the Merger Agreement, and an order compelling the defendants to specifically perform their obligations under the Merger Agreement to use reasonable best efforts to consummate and make effective the Merger. On April 30, 2018, the defendants filed a verified counterclaim alleging that, due primarily to purported data integrity deficiencies, the Company had breached representations, warranties and covenants in the Merger Agreement, and that it had experienced a material adverse effect. The verified counterclaim sought, among other things, a declaration that defendants’ purported termination of the Merger Agreement was valid and that defendants were not obligated to consummate the transaction, and damages.

Following expedited discovery, from July 9 to 13, 2018, the Court of Chancery held a trial on the parties' claims (the "Delaware Action"). At the conclusion of trial, the Court of Chancery ordered post-trial briefing, which was completed on August 20, 2018, and a post-trial hearing, which was held on August 23, 2018.

On October 1, 2018, the Court of Chancery issued an opinion (the "Opinion") denying Akorn's claims for relief and concluding that Fresenius Kabi AG had validly terminated the Merger Agreement. The Court of Chancery concluded that Akorn had experienced a material adverse effect due to its financial performance following the signing of the Merger Agreement; that Akorn had breached representations and warranties in the Merger Agreement and that those breaches would reasonably be expected to give rise to a material adverse effect; that Akorn had materially breached covenants in the Merger Agreement; and that Fresenius was materially in compliance with its own contractual obligations. On October 17, 2018, the Court of Chancery entered partial final judgment against Akorn on its claims and in favor of the Fresenius parties on their claims for declaratory judgment. The Court of Chancery entered an order holding proceedings on the Fresenius parties' damages claims in abeyance pending the resolution of any appeal from the partial final judgment.

On October 18, 2018, Akorn filed a notice of appeal from the Opinion and the partial final judgment, as well as a motion seeking expedited treatment of its appeal. On October 23, 2018, the Delaware Supreme Court granted Akorn's motion for expedited treatment and set a hearing on Akorn's appeal for December 5, 2018.

On December 7, 2018, the Delaware Supreme Court affirmed the Court of Chancery's ruling denying Akorn's claims for declaratory and injunctive relief and granting Defendants' counterclaim for a declaration that the termination was valid. On December 27, 2018, the Delaware Supreme Court issued a mandate returning the case to the Court of Chancery for consideration of all remaining issues, including the Fresenius parties' damages claims.

On January 15, 2019, the parties filed a joint letter to the Court of Chancery seeking thirty days to discuss the potential resolution of the Fresenius parties' damages claims. On February 19, 2019, the parties filed a joint letter advising the Court that they have been unable to resolve the Fresenius parties' damages claims. The Fresenius parties stated their intention to seek leave to amend their counterclaims to assert a new claim for fraud and that they would seek an expedited trial on such claim purportedly due to Akorn's financial condition. Akorn stated that it expected to oppose the motions for amendment and expedition, and that it would move to dismiss the Fresenius parties' damages claims in their entirety.

On February 20, 2019, the Fresenius parties filed a motion for leave to amend and supplement their counterclaim. The Fresenius parties' proposed amended and supplemented counterclaim alleges that Akorn fraudulently induced Fresenius to enter into the Merger Agreement and thereafter willfully breached contractual representations and warranties and covenants therein. It seeks damages of approximately $102 million. On February 25, 2019, Akorn filed an opposition to the Fresenius parties' motion for leave to amend and supplement their counterclaim, arguing that the motion was untimely and prejudicial. On February 27, 2019, the Fresenius parties filed a reply in further support of their motion to file an amended and supplemented counterclaim. On February 28, 2019, the Court of Chancery denied the Fresenius parties' motion for leave to file an amended and supplemented counterclaim.

Akorn AG (formerly Excelvision AG). To expand our ophthalmic manufacturing capacity, our Luxembourg subsidiary, Akorn International S.à r.l., closed a share purchase agreement on January 2, 2015 with Fareva SA to acquire all of the issued and outstanding shares of capital stock of Excelvision AG, a Swiss company ("Excelvision AG"). Excelvision AG was a contract manufacturer located in Hettlingen, Switzerland specializing in ophthalmic products. On April 1, 2016, the name of Excelvision AG was changed to Akorn AG.

VersaPharm. On August 12, 2014, we completed the acquisition of VPI Holdings Corp. ("VPI"), the parent company of VersaPharm Incorporated, a Georgia corporation ("VersaPharm") (the "VersaPharm Acquisition"). VersaPharm was a developer and marketer of multi-source prescription pharmaceuticals. VersaPharm's product portfolio, pipeline and development capabilities were complementary to the Hi-Tech Pharmacal Co., Inc. ("Hi-Tech") acquisition, described below, through which we acquired manufacturing capabilities needed for many of VersaPharm's marketed and pipeline products.

Hi-Tech Pharmacal Co., Inc. On April 17, 2014, we completed the acquisition of Hi-Tech, which developed, manufactured and marketed generic and branded prescription and OTC drug products, and specialized in liquid and semi-solid dosage forms (the "Hi-Tech Acquisition"). The acquisition was approved by the shareholders of Hi-Tech on December 19, 2013, and was approved by the FTC on April 11, 2014 following review pursuant to provisions of the Hart-Scott Rodino Act ("HSR"). Hi-Tech's ECR Pharmaceuticals subsidiary ("ECR"), which marketed branded prescription products, was divested during the year ended December 31, 2014.

The Hi-Tech Acquisition complemented and expanded our manufacturing capabilities and product portfolio by diversifying our offerings to our retail customers beyond ophthalmics to other niche dosage forms such as oral liquids,

topical creams and ointments, nasal sprays and otics. The Hi-Tech Acquisition also enhanced our new product pipeline. Further, the Hi-Tech Acquisition added branded OTC products in the categories of cough and cold, nasal sprays and topicals to our TheraTears® brand of eye care products.

Business Development and Licensing

Supplemental to our strategic mergers and acquisitions strategy, we also seek to enhance our current generic and branded product lines through the acquisition or licensing of on-market or in-development products that expand or complement our current branded and generic product portfolio. Below is a summary of product acquisition and licensing transactions that we made from 2013 to 2018. See Item 1A - Risk Factors for a description of risks that accompany our business development.

Lloyd Products Acquisition. To expand our animal health product portfolio, our wholly-owned subsidiary Akorn Animal Health, Inc. entered into a definitive product acquisition agreement on October 2, 2014 with Lloyd, Inc. to acquire certain rights and inventory related to a portfolio of animal health injectable products used in pain management and anesthesia.

Xopenex Product Acquisition. To expand our prescription product portfolio of respiratory products, we entered into a definitive product acquisition agreement with Sunovion Pharmaceuticals Inc., on October 1, 2014 to acquire certain rights and inventory related to Xopenex® Inhalation Solution (levalbuterol hydrochloride).

Zioptan Product Acquisition. To expand our branded ophthalmology portfolio, we acquired the rights to the U.S. NDA for Zioptan™, a prescription ophthalmic eye drop indicated for reducing elevated intraocular pressure in patients with open-angle glaucoma or ocular hypertension, from Merck, Sharp and Dohme Corp. ("Merck") on April 1, 2014.

Betimol Product Acquisition. To expand our branded ophthalmology portfolio, we acquired the rights to the U.S. NDA for Betimol®, a prescription ophthalmic eye drop for the reduction of eye pressure in glaucoma patients, from Santen Pharmaceutical Co., Ltd., ("Santen") on January 2, 2014.

Merck Products Acquisition. On November 15, 2013, we acquired three ophthalmic U.S. NDAs from Merck:

- AzaSite® — (azithromycin ophthalmic solution), a prescription sterile eye drop solution used to treat bacterial conjunctivitis;
- Cosopt® — (dorzolamide hydrochloride and timolol maleate ophthalmic solution), a prescription sterile eye drop solution that is used to reduce intraocular pressure in patients with open-angle glaucoma or ocular hypertension; and
- Cosopt® PF, supplied in sterile, single-use containers.

This acquisition expanded our line of prescription ophthalmic products to include additional branded products. The acquisition included our acquisition of a Merck subsidiary corporation, Inspire Pharmaceuticals, Inc. ("Inspire"), which was and continues to be the holder of the product rights to AzaSite®.

Our Segments

The Company has identified two reportable segments with which we operate our business. These segments are the Prescription Pharmaceuticals Segment and the Consumer Health Segment.

Prescription Pharmaceuticals Segment. Our Prescription Pharmaceuticals segment primarily consists of generic and branded prescription pharmaceuticals in a variety of dosage forms, including sterile ophthalmics, injectables and inhalants and non-sterile oral liquids, topicals, nasal sprays and otics. We also market a number of pain management drugs, including drugs subject to the Controlled Substances Act. The segment represented 89.4% of our net revenue in 2018. Please see Part II, Item 8, Note 12 - "Segment Information" for further detail of the Prescription Pharmaceuticals segment.

While the majority of sales within the Prescription Pharmaceuticals segment are derived from generic products, Akorn markets a line of branded ophthalmic and respiratory products including brands such as Akten®, a topical ocular anesthetic gel, AzaSite®, an antibiotic used to treat bacterial conjunctivitis, Cosopt®, Cosopt® PF, Betimol® and Zioptan™, which are used in the treatment of glaucoma, and Xopenex® Inhalation Solution, used in the treatment or prevention of bronchospasm.

Consumer Health Segment. Our Consumer Health segment primarily consists of branded and private-label OTC products and animal health products dispensed by veterinary professionals. Our branded and private-label OTC

products are primarily focused on ophthalmics including a leading dry eye treatment TheraTears® Therapy for Your Eyes®. We also market other OTC consumer health products including Mag-Ox®, a magnesium supplement, and the Diabetic Tussin® line of cough and cold products. Our animal health portfolio is focused on products complementary to our human health prescription portfolio, leveraging our R&D and manufacturing capabilities for alternative dosage form products. Major products within our animal health portfolio include Anased® and VetaKet® veterinary sedatives; Tolazine® and Yobine®, sedative reversing agents; and Butorphic®, a pain reliever. Please see Part II, Item 8, Note 12 "Segment Information" for further detail of the Consumer Health segment.

Our Products

Our major products are listed alphabetically below.

- AK-FLUOR® (fluorescein injection, USP). We market our branded fluorescein injection as AK-FLUOR® 10% (100 mg/mL) and 25% (250 mg/mL). AK-FLUOR® is indicated in diagnostic fluorescein angiography or angioscopy of the retina and iris vasculature.

- Atropine Sulfate Ophthalmic Solution. We received approval of our NDA for Atropine Sulfate Ophthalmic Solution, USP, 1% in July 2014. We had previously been marketing this product as an unapproved product.

- Cosopt® PF. We acquired the rights to the U.S. NDA for Cosopt® PF (2% Dorzolamide Hydrochloride 0.5% and Timolol Maleate supplied in sterile, single-use containers), a preservative-free prescription ophthalmic eye drop indicated for the reduction of elevated intraocular pressure (IOP) in patients with open-angle glaucoma or ocular hypertension who are insufficiently responsive to beta-blockers, through the Merck Products Acquisition on November 15, 2013.

- Dehydrated Alcohol Injection. We began marketing Dehydrated Alcohol Injection, USP in 1997. Our Dehydrated Alcohol Injection is not an FDA approved product and to date our product has not been found by the FDA to be safe and effective.

- Ephedrine Sulfate Injection. We originally began marketing Ephedrine Sulfate Injection, USP, 50 mg/mL in 1 mL single-dose ampules in 1997 as an unapproved product. In March 2017, we received FDA approval of our NDA for Ephedrine Sulfate Injection.

- Myorisan™ (isotretinoin capsules, USP). We acquired Myorisan™ isotretinoin capsules, USP, in 10 mg, 20 mg and 40 mg strengths through the VersaPharm Acquisition. We subsequently received approval for the 30 mg strength in 2015.

- Nembutal® Sodium Solution (pentobarbital sodium injection, USP). We market our pentobarbital sodium injection as Nembutal® Sodium Solution. Nembutal® is a DEA Schedule II controlled drug.

- Phenylephrine Hydrochloride Ophthalmic Solution. We began marketing Phenylephrine Hydrochloride Ophthalmic Solution, USP, 2.5% shortly after FDA approval of our NDA in January 2015.

- TheraTears® Dry Eye Therapy Lubricant Eye Drops. TheraTears® is an over-the-counter eye drop that is used as a lubricant to relieve dryness of the eye. TheraTears® unique hypotonic and electrolyte balanced formula replicates healthy tears.

- Zioptan™. We acquired the rights to the U.S. NDA for Zioptan™ (tafluprost ophthalmic solution) 0.0015%, a preservative-free prescription ophthalmic eye drop indicated for reducing elevated intraocular pressure in patients with open-angle glaucoma or ocular hypertension, from Merck, in April 2014.

Most of the products discussed above have several generic equivalent competitors. In the year ended December 31, 2018, none of the Company’s products represented 10% or more of total net revenue.

Sales and Marketing

We rely on our sales and marketing teams to help us maintain and, where possible, increase market share for our products. Our sales organization is structured as follows:

(1) field sales teams focused on branded ophthalmology products;
(2) field sales teams focused on institutional markets;
(3) inside sales team focused on customers in smaller markets, and;

(4) national accounts sales team focused on wholesalers, distributors, retail pharmacy chain and group purchasing organizations (“GPOs”).

Our field sales representatives promote ophthalmic products directly to retinal surgeons and ophthalmologists, and other pharmaceutical products directly to local hospitals in order to support compliance and pull-through against existing contracts. Our inside sales team augments our outside sales teams to sell products in markets where field sales would not be cost effective. Our national accounts sales team seeks to establish and maintain contracts with wholesalers, distributors, retail pharmacy chains and GPOs. As of the year ended December 31, 2018, we utilized a sales force of 74 field and inside sales representatives to promote our product portfolio. To support our sales efforts, we also have a customer service team and a marketing department focused on promoting and raising awareness about our product offerings.

Competition

Prescription Pharmaceuticals. The sourcing, marketing and manufacturing of pharmaceutical products is highly competitive, with many established manufacturers, suppliers and distributors actively engaged in all phases of the business. We compete principally on the quality of our products and services, reliability of our supply, breadth of our portfolio, depth of our customer relationships and price. Many of our competitors have substantially greater financial and other resources, including greater sales volume, larger sales forces and greater manufacturing capacity. See Item 1A - Risk Factors - “Our branded products may become subject to increased generic competition” for more information.

Generic Pharmaceuticals. Companies that compete with our generic pharmaceuticals portfolio include Teva Pharmaceutical Ltd., Apotex Inc., Fresenius Kabi AG, Hikma Pharmaceuticals plc, Novartis International AG (through their Sandoz and Alcon subsidiaries), Perrigo Company plc, Pfizer Inc., Mylan N.V., Amneal Pharmaceuticals, Inc., Taro Pharmaceutical Industries Ltd. and Bausch Health Companies Inc., among others.

Branded Pharmaceuticals. Companies that compete with our branded pharmaceuticals portfolio include Allergan plc, Novartis International AG (through their Alcon subsidiary), Pfizer Inc. and Bausch Health Companies Inc., among others. Additionally, potential generic entrants with equivalent products referencing our branded products present an additional competitive threat.

Consumer Health. Like our Prescription Pharmaceuticals segment, the sourcing, manufacturing and marketing of Consumer Health products is highly competitive, with many established manufacturers, suppliers and distributors actively engaged in all phases of the business. With the Company’s relatively small OTC and animal health product portfolio, many of our competitors have substantially greater financial and other resources, including greater sales volume, larger sales forces and greater manufacturing capacity. Within this market, we compete primarily on product offering, as well as price and service.

The companies that compete with our Consumer Health segment include both generic and name brand companies such as Johnson & Johnson, Perrigo Company plc., Pfizer Inc., and Bausch Health Companies Inc., among others.

Seasonality

The majority of our products do not experience significant seasonality. We do market certain prescription pharmaceutical and consumer health products for the treatment of allergies which typically generate consumer demand in the warmer months as well as cough and cold products which typically generate higher consumer demand in the colder months, but we do not believe these products materially impact our overall sales trends. Additionally, we market various antidote products through our Prescription Pharmaceuticals segment, the sales of which are largely timed to the expiration of existing stock held by our customers.

Major Customers

For the years ended December 31, 2018, 2017 and 2016, a high percentage of our sales were to the three large wholesale drug distributors noted below. These three wholesale drug distributors account for a significant portion of our gross sales, net revenue and accounts receivable in both of our segments. The three large wholesale drug distributors are:

- AmerisourceBergen Corporation (“Amerisource”);
- Cardinal Health, Inc. (“Cardinal”); and
- McKesson Corporation (“McKesson”).

On a combined basis, these three wholesale drug distributors accounted for approximately 83.0% of our total gross sales and 61.7% of our net revenue in the year ended December 31, 2018, and 85.5% of our gross accounts receivable as of December 31, 2018. The difference between gross sales and net revenue is that gross sales is calculated before allowances for chargebacks, rebates, administrative fees and others, promotions and product returns (See Part II, Item 8, Note 2 - “Summary of Significant Accounting Policies” for more information).

The table below presents the percentages of our total gross sales, net revenue and gross trade accounts receivable attributed to each of these three wholesale drug distributors as of and for the years ended December 31, 2018, 2017 and 2016, respectively:

	2018			2017			2016		
	Gross Sales	Net Revenue	Gross Accounts Receivable	Gross Sales	Net Revenue	Gross Accounts Receivable	Gross Sales	Net Revenue	Gross Accounts Receivable
Amerisource	20.5%	20.9%	17.9%	23.6%	19.1%	26.3%	29.5%	23.3%	35.6%
Cardinal	20.7%	15.8%	19.3%	17.5%	17.9%	21.1%	15.4%	16.3%	15.1%
McKesson	41.8%	25.0%	48.3%	39.1%	26.5%	38.6%	32.5%	24.2%	33.2%
Combined Total	83.0%	61.7%	85.5%	80.2%	63.5%	86.0%	77.4%	63.8%	83.9%
Other	17.0%	38.3%	14.5%	19.8%	36.5%	14.0%	22.6%	36.2%	16.1%
Combined Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Amerisource, Cardinal and McKesson are key distributors of our products, as well as a broad range of healthcare products for many other companies. None of these distributors is an end user of our products. Generally speaking, if sales to any one of these distributors were to diminish or cease, we believe that the end users of our products would likely find little difficulty obtaining our products from another distributor; however, the loss of one or more of these distributors, together with a delay or inability to secure an alternative distribution source for end users, could have a material negative impact on our revenue, business, financial condition and results of operations.

We consider our business relationships with Amerisource, Cardinal and McKesson to be in good standing and we currently have fee for services contracts with each of them; however, a change in purchasing patterns, a decrease in inventory levels, an increase in returns of our products, delays in purchasing products and delays in payment for products by one or more of these distributors could have a material negative impact on our revenue, business, financial condition and results of operations. See Item 1A - Risk Factors — “We depend on a small number of wholesalers to distribute our products, the loss of any of which could have a material adverse effect on our business” for more information.

Backorders

As of December 31, 2018, we had approximately $28.2 million of products on backorder as compared to approximately $12.2 million of backorders as of December 31, 2017 and $15.5 million as of December 31, 2016.

Foreign Sales

During the years ended December 31, 2018, 2017 and 2016, approximately $16.4 million, $25.5 million, and $26.3 million of our net revenue, respectively, was related to sales to customers in foreign countries.

Our business is subject to risks of currency fluctuations, governmental actions and other governmental proceedings abroad. We do not regard these risks as a deterrent to further expansion of our operations abroad; however, we closely review our methods of operations and seek to adopt strategies responsive to changing economic and political conditions.

Suppliers

We require raw materials and components to manufacture and package pharmaceutical products. The principal components of our products are active and inactive pharmaceutical ingredients and certain packaging materials. Many of these materials are available from only a single source and, in the case of many of our products, only one supplier of raw materials has been identified and qualified. Because FDA approval of drugs requires manufacturers to specify their proposed suppliers of active ingredients and certain packaging materials in their applications, FDA approval of

any new supplier would be required if such active ingredients or such packaging materials were no longer available from the specified supplier. The qualification of a new supplier could delay our development and marketing efforts. If for any reason we are unable to obtain sufficient quantities of any of the raw materials or components required to produce and package our products, we may not be able to manufacture our products as planned. In addition, certain of the pharmaceutical products that we market are manufactured by third parties that serve as our only supplier of those products. Any delays or failure of a contract manufacturing partner to supply finished goods timely or in adequate volume could impede our marketing of those products.

No supplier represented 10% or more of our purchases in the years ended December 31, 2018, 2017 or 2016. See Item 1A - Risk Factors - “Many of the raw materials and components used in our products come from a single source, the loss of any of

which could have a material adverse effect on our business" and "A significant portion of our revenues are generated through the sale of products manufactured by third parties, the loss or failure of any of which may have a material adverse effect on our business, financial position and results of operations" for more information.

Manufacturing

We operate manufacturing facilities in Decatur, Illinois; Somerset, New Jersey; Amityville, New York and Hettlingen Switzerland. In addition, we own a manufacturing facility in Paonta Sahib, Himachal Pradesh, India that is not currently manufacturing any products for sale. See Item 2 - Properties, for more information. Through these manufacturing facilities we manufacture a diverse assortment of sterile and non-sterile pharmaceutical products including oral liquids, otics, nasal sprays, liquid injectables, lyophilized injectables, topical gels, creams and ointments; and ophthalmic solutions and ointments for both of our reportable segments. By location, these include:

- Somerset, New Jersey — sterile ophthalmic solutions, ointments and gels
- Decatur, Illinois — sterile liquid and lyophilized injectables and sterile ophthalmic solutions
- Amityville, New York — sterile ophthalmic and otic solutions, sterile gels, and non-sterile nasal sprays, topical ointments and creams, oral liquids, and liquid unit dose cups
- Hettlingen, Switzerland — sterile ophthalmic solutions, suspensions, gels and ointments
- Paonta Sahib, Himachal Pradesh, India — sterile liquid injectables including cephalosporins, carbapenems, hormones and general injectables

Patents, Trademarks and Proprietary Property

We consider the protection of our patents, trademarks and proprietary rights important to maintaining and growing our business. Through our acquisitions, we have increased the number and importance of trademarks related to our products and product lines. Through acquisitions, we also acquired rights to the trade names for the branded, prescription ophthalmic products AzaSite®, Betimol®, Cosopt® PF, and Zioptan®, respiratory product Xopenex®, as well as OTC products TheraTears®, SinusBuster®, Mag-Ox®, Multi-betic® and Zostrix®. We are committed to maintaining and defending these trade names as they are important in supporting the success and growth of this business. In addition, we maintain and defend trademarks related to a number of internally-developed products, as well as others licensed from third parties.

We have sought, and intend to continue to seek, patent protection in the United States and selected foreign countries where deemed appropriate and advantageous to us. The importance of these patents does not vary among our business segments.

We also rely upon trade secrets, unpatented proprietary know-how and continuing technological innovation to maintain and develop our competitive position. We enter into confidentiality agreements with certain of our employees pursuant to which such employees agree to assign to us any inventions relating to our business made by them while in our employ; however, there can be no assurance that others may not acquire or independently develop similar technology or, if patents are not issued with respect to products arising from research, that we will be able to maintain information pertinent to such research as proprietary technology or trade secrets. For more information, see Item 1A. Risk Factors - "Third parties may claim that we infringe their proprietary rights and may prevent or delay us from manufacturing and selling some of our new products" and "Our patents and proprietary rights may be challenged, circumvented or otherwise compromised by competitors, which may result in our protected products losing their market exclusivity and becoming subject to generic competition before their patents expire."

Government Regulation

Pharmaceutical manufacturers and distributors are subject to extensive regulation by government agencies, including the FDA, the Drug Enforcement Administration ("DEA"), the FTC and other federal, state and local agencies. The

development, testing, manufacturing, processing, quality, safety, efficacy, packaging, labeling, recordkeeping, distribution, storage and advertising of our products, and disposal of waste products arising from such activities, are subject to regulation by the FDA, DEA, FTC, the Consumer Product Safety Commission, the Occupational Safety and Health Administration and the Environmental Protection Agency. Similar state and local agencies also have jurisdiction over these activities. Noncompliance with applicable United States and/or state or local regulatory requirements can result in fines, injunctions, penalties, mandatory recalls or seizures, suspensions of production, recommendations by the FDA against governmental contracts and criminal prosecution. In addition, we are subject to oversight from federal and state government benefit programs, healthcare fraud and abuse laws and international regulations in jurisdictions in which we manufacture or sell our pharmaceutical products.

FDA. The Federal Food, Drug and Cosmetic Act (the “FDC Act”), the Controlled Substance Act and other federal statutes and regulations govern or influence the development, testing, manufacture, labeling, storage and promotion of products that we

manufacture and market. The FDA inspects drug manufacturers and storage facilities to determine compliance with its current Good Manufacturing Practices ("cGMP") regulations, non-compliance with which can result in fines, recall and seizure of products, total or partial suspension of production, refusal to approve NDAs and ANDAs and criminal prosecution. Under the FDC Act, the federal government has extensive administrative and judicial enforcement authority over the activities of finished drug product manufacturers to ensure compliance with FDA regulations. This authority includes, but is not limited to, the authority to initiate judicial action to seize unapproved or non-complying products, to enjoin non-complying activities, to halt manufacturing operations that are not in compliance with cGMP, to recall products, to seek civil and monetary penalties and to criminally prosecute violators. Other enforcement activities include refusal to approve product applications, withdrawal of previously approved applications or prohibition on marketing of certain unapproved products.

FDA approval is required before any prescription drug products can be marketed. New drugs require the filing of an NDA, including clinical studies demonstrating the safety and efficacy of the drug. Generic drugs, which are therapeutic equivalents of existing brand name drugs, require the filing of an ANDA. An ANDA does not, for the most part, require clinical studies since safety and efficacy have already been demonstrated by the product originator; however, the ANDA must provide data to support the bioequivalence of the generic drug product. The time required by the FDA to review and approve NDAs and ANDAs is variable and, to a large extent, beyond our control.

In 2018, our Decatur, Illinois and Somerset, New Jersey manufacturing facilities were inspected by the FDA and received "Other Action Indicated" status as an outcome of the inspections. On January 4, 2019, the company was issued a warning letter from the FDA related to the 2018 inspection of the Decatur, Illinois manufacturing facility. The Company submitted a comprehensive response to the warning letter on January 28, 2019.

DEA. We manufacture and distribute several controlled drug substances, the distribution and handling of which are regulated by the DEA, which imposes, among other things, certain licensing, security and record-keeping requirements, as well as quotas for the manufacture, purchase, storage and sale of controlled substances. Failure to comply with DEA regulations (and similar state regulations) can result in fines or seizure of product. There have not been any material fines, seizures or interruptions resulting from DEA inspections in any of the years ended December 31, 2018, 2017 and 2016.

We are subject to periodic inspections by the DEA in facilities where we manufacture, process or distribute controlled substances. The DEA inspected our Decatur, Illinois facility in December 2018 and January 2019, and issued two observations to which the Company responded.

See Item 1A. Risk Factors - Risk factors under the "Risks Related to Regulations" category for more information.

Government Benefit Programs. We sell products that can be subject to the statutory and regulatory requirements for Medicaid, Medicare, TRICARE and other government healthcare programs. These regulations govern access and reimbursement levels, including that all pharmaceutical companies pay rebates to individual states based on a percentage of sales arising from Medicaid-reimbursed products. We are also subject to price ceilings for select products sold through the military TRICARE program. U.S. Federal and state governments may continue to enact legislation and other measures aimed at containing or reducing payment levels for prescription pharmaceuticals paid for in whole or in part with government funds. We cannot predict the nature of such potential future measures or the impact on our profitability.

Healthcare Laws. We are subject to various federal, state and local laws targeting fraud and abuse in the healthcare industry. In the United States, there are various federal and state anti-kickback laws that prohibit payment or receipt of kickbacks, bribes or other remuneration intended to induce the purchase or recommendation of healthcare products and services or reward past purchases or recommendations. Violations of these anti-kickback laws can lead to civil

and/or criminal penalties, including fines, imprisonment and exclusion from participation in government healthcare programs. See Item 1A - Risk Factors - “Any failure to comply with the complex reporting and payment obligations under Medicare, Medicaid and other government programs may result in litigation or sanctions,” for more information. We are also subject to other healthcare laws, notably:

- Federal Civil False Claims Act. We are also subject to the provisions of the federal civil False Claims Act and, in particular, actions brought pursuant to the False Claims Act’s whistleblower or qui tam provisions. The civil False Claims Act imposes liability on any person or entity that, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. The qui tam provisions of the False Claims Act allow a private individual to bring civil actions on behalf of the federal government alleging that the defendant has submitted or caused the submission of 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 claim laws analogous to the False Claims Act. Many of these state laws apply where a claim is submitted to any third-party payer and not merely a federal healthcare program.

- HIPAA. Fraud provisions in the Health Insurance Portability and Accountability Act ("HIPAA") of 1996 prohibits knowingly and willingly executing a scheme to defraud any healthcare benefit program, including those of private third-party payers. Also, false statement provisions within HIPAA prohibits knowingly and willingly 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.

- Federal Physician Payments Sunshine Act. The Federal Physician Payments Sunshine Act mandates annual reporting of various types of payments to physicians and teaching hospitals. Under the regulations, applicable drug, biological, device, and medical supply manufacturers are required to report to CMS payments or other transfers of value made to healthcare professionals and teaching hospitals, and the regulations also require the manufacturers and GPOs to report ownership and investment interests held by physicians or their immediate family members. The rule sets forth a reporting process that permits physicians, teaching hospitals, and physician owners and investors to dispute information reported by applicable manufacturers and GPOs. Under the regulations, information that is the subject of a dispute not resolved within the initial allotted 60-day review and dispute resolution period will be posted on CMS's public website in the manner in which it was submitted by the manufacturer or GPO, rather than in a manner that includes the version provided by the disputing physician, teaching hospital, or physician owner or investor. Failure to comply with required reporting requirements could subject pharmaceutical manufacturers and others to substantial civil monetary penalties.

- International Regulations. The Company and its employees are subject to the US Foreign Corrupt Practices Act ("FCPA"), as well as other international anti-corruption laws. In addition, we have two international manufacturing facilities that are subject to local anti-corruption laws and regulations that differ from those under which we operate in the United States. The regulatory agencies outside of the United States that we interact with include Swissmedic in Switzerland and the Central Drugs Standard Control Organization in India.

Government Contracts

We maintain distribution contracts with the U.S. Federal Government, including the U.S. Department of Veterans Affairs, among others. A number of these contracts allow the U.S. Federal Government to terminate such contracts upon written notice. We do not believe that any single termination is likely or would be material to our operations.

Employees

As of December 31, 2018 we had a total of 2,220 employees globally, consisting of 2,191 permanent, full-time employees and 29 part-time or temporary employees. Our full and part time or temporary employees worked in the following locations:

Country	Full-Time	Part-Time or Temp
United States of America	1,667	3
India	360	—
Switzerland	164	26
Total	2,191	29

We believe we have good relations with our employees. Our full-time and part-time employees are not represented by collective bargaining agreements. All U.S. full-time Akorn employees are eligible to participate in the Company's 401(k) Plan. The Company matches the employee contribution to 50% of the first 6% of an employee's eligible compensation. Company matching contributions vest 50% after two years of credited service and 100% after three years of credited service. During the years ended December 31, 2018, 2017 and 2016, plan-related expense totaled

approximately $2.6 million, $2.6 million and $2.2 million, respectively. The Company's matching contribution is funded on a current basis.

Environment

Our operations are subject to foreign, federal, state and local environmental laws and regulations concerning, among other matters, the generation, handling, storage, transport, treatment and disposal of, or exposure to, prescription drugs and toxic and hazardous substances. Violation of these laws and regulations, which frequently change, can lead to substantial fines and penalties. Some of our operations require environmental permits and controls to prevent and limit pollution. We believe that our facilities are in compliance with applicable environmental laws and regulations and we do not anticipate any material adverse effect from

compliance with foreign, federal, state and local provisions that have been enacted or adopted regulating the discharge of materials into the environment, or otherwise relating to the protection of the environment.

Available Information

Our internet address is http://www.akorn.com. The contents of our website are not part of this Annual Report on Form 10-K, and our internet address is included in this document as an inactive textual reference only. We make our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports available free of charge on our website as soon as reasonably practicable after we file such reports with, or furnish such reports to, the SEC.

Materials filed with the SEC can also be read and copied at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

Item 1A. Risk Factors.

An investment in our common stock involves a high degree of risk. In addition to the other information included in this Annual Report on Form 10-K, you should carefully consider each of the risks described below before purchasing shares of our common stock. The risk factors set forth below are not the only risks that may affect our business. Our business could also be affected by additional risks not currently known to us or that we currently deem to be immaterial. If any of the following risks actually occur, our business, financial condition and results of operations could materially suffer. As a result, the trading price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to the Termination of the Merger Agreement and the Delaware Opinion

There are material uncertainties and risks associated with damage claims from the Fresenius parties' and Akorn's shareholders as a result of the termination of the April 2017 Merger Agreement.

On April 24, 2017, we signed the Merger Agreement with the Fresenius parties. On April 22, 2018, the Fresenius parties sent Akorn a notice terminating the Merger Agreement. After expedited litigation, the Delaware Court of Chancery ruled on October 1, 2018, that the termination was valid. That ruling was upheld on appeal by the Delaware Supreme Court on December 7, 2018. On February 20, 2019, the Fresenius parties filed a motion for leave to amend and supplement its counterclaim against Akorn in order to recover damages purportedly incurred in connection with the Merger Agreement. On February 28, 2019, the Court of Chancery denied the Fresenius parties' motion for leave to file an amended and supplemented counterclaim. Proceedings on the proposed damages counterclaim are currently ongoing.

In addition, various purported shareholders of Akorn have filed putative class action and derivative claims against Akorn, its directors and its officers relating to the Merger Agreement, Akorn's regulatory compliance status and/or Akorn's public statements and SEC filings. Proceedings in those cases are ongoing.

Below are material uncertainties and risks associated with the termination of the Merger Agreement, the ongoing litigation with the Fresenius parties and the pending shareholder litigations. If any of the risks develop into actual events, then our business, financial condition, results and ongoing operations, stock price or prospects could be materially adversely affected.

- The litigations may involve significant defense costs and indemnification liabilities and may result in significant monetary judgments against Akorn, which may adversely affect our business, financial condition and results of operations;
- The litigations, whether or not resolved favorably, may damage our long-term reputation, attract adverse media coverage, interfere with our relationships with key stakeholders and/or interfere with our ability to attract and retain employees; and
- The litigations may divert the attention of our employees and management, which may affect our business operations.

Risks Related to Our Business.

Our growth depends on our ability to timely and efficiently develop and successfully launch and market new pharmaceutical products.

Our strategy for growth is dependent upon our ability to develop products that can be promoted through current marketing and distribution channels and, when appropriate, the enhancement of such marketing and distribution channels. We may fail to meet our anticipated time schedule for the filing of new applications or may decide not to

pursue applications that we have already submitted or had anticipated submitting. Our failure to develop new products or to receive regulatory approval of applications could have a material adverse effect on our business, financial condition and results of operations. Even if approved, we may have technical challenges or capacity constraints that prevent successful launch and marketing of new products. Even if successfully launched, no assurance can be given as to the actual size of the market for any product or the level of profitability and sales of the product.

Business interruptions at our manufacturing facilities can have a material adverse effect on our business, financial position and results of operations.

We manufacture drug products at three domestic and one international manufacturing facilities, and we have contracted with a number of third parties to provide other manufacturing, finishing, and packaging services. We face a substantial risk to our business when any one or more of these facilities is shut down or unable to operate at full capacity as a result of business interruptions, governmental or regulatory actions, hurricanes, tornadoes, earthquakes, fire, contamination, power shortages,

strikes, terrorist acts, or natural or man-made catastrophic events. For example, we suspended manufacturing at our facility in Somerset, New Jersey during the latter part of 2018 to facilitate the acceleration of the move to our newly constructed laboratory; personnel and equipment requalification and training; and other various cGMP enhancements. This short-term disruption impaired our ability to produce and ship drug products to the market on a timely basis, which resulted in failure to supply penalties, late fees and other adverse impacts on our business.

A significant portion of our revenues are generated through the sale of products manufactured by third parties, the loss or failure of any of which may have a material adverse effect on our business, financial position and results of operations.

Certain of the pharmaceutical products that we market, representing a significant portion of our net revenue, are manufactured by third parties that serve as our only supplier of those products. Any delays or failure of a contract manufacturing partner to supply finished goods timely or in adequate volume could impede our marketing of those products. We expect this risk to become more significant as we receive approvals for new products to be manufactured through our strategic partnerships and as we seek additional growth opportunities beyond the capacity and capabilities of our current manufacturing facilities. If we are unable to obtain or retain third-party manufacturers for these products on commercially acceptable terms, we may not be able to distribute such products as planned. Any delays or difficulties with third-party manufacturers could adversely affect the marketing and distribution of certain of our products, which could have a material adverse effect on our business, financial condition and results of operations.

We depend on a small number of wholesalers to distribute our products, the loss of any of which could have a material adverse effect on our business.

A small number of large wholesale drug distributors account for a significant portion of our gross sales, net revenue and accounts receivable. The following three wholesalers — Amerisource, Cardinal and McKesson — accounted for approximately 83.0% of total gross sales and 61.7% of total net revenue in 2018, and constituted 85.5% of gross trade receivables as of December 31, 2018. In addition to acting as distributors of our products, these three companies also distribute a broad range of healthcare products on behalf of many other companies. The loss of our relationship with one or more of these wholesalers, together with a delay or inability to secure an alternative distribution source for our hospital, retail and other customers, could have a material adverse impact on our revenue and results of operations. A change in purchasing patterns or inventory levels, an increase in returns of our products, delays in purchasing products and delays in payment for products by one or more of these wholesale drug distributors also could have a material adverse impact on our revenue, results of operations and cash flows.

We may be subject to significant disruptions or failures in our information technology systems and network infrastructures that could have a material adverse effect on our business.

We rely on the efficient and uninterrupted operation of complex information technology systems and network infrastructures to operate our business. We also hold data in various data center facilities upon which our business depends. Although we have experienced occasional, actual or attempted breaches of our cybersecurity, none of these breaches has had a material effect on our business, operations or reputation. Any significant disruption, infiltration or failure of our information technology systems or any of our data centers as a result of software or hardware malfunctions, system implementations or upgrades, computer viruses, third-party security breaches, employee error, theft, misuse or malfeasance could cause breaches of data security, loss of intellectual property and critical data and the release and misappropriation of sensitive competitive information. Any of these events could result in the loss of key information, impair our production and supply chain processes, damage our reputation in the marketplace, deter people from purchasing our products, cause us to incur significant costs to remedy any damages, subject us to significant civil and criminal liability and require us to incur significant technical, legal and other expenses, and ultimately materially and adversely affect our business, results of operations, financial condition and price of our

common stock.

We depend on our employees and must continue to attract and retain key personnel in order to be successful, and failure to do so hinders successful execution of our business and development plans.

Our performance depends, to a large extent, on the continued service of our key R&D personnel, other technical employees, managers and sales personnel and our ability to continue to attract and retain such personnel. Competition for such personnel is intense, particularly for highly motivated and experienced R&D and other technical personnel. We are facing increasing competition from companies with greater financial resources for such personnel. As a result, from time to time, we have faced challenges in attracting and retaining highly skilled personnel, particularly during 2017 and 2018, which has adversely affected our business operations.

We are involved in legal proceedings and governmental investigations from time to time, any of which may result in substantial losses, government enforcement actions, damage to our business and reputation and place a strain on our internal resources.

In the ordinary course of our business, we become involved in legal proceedings, as a party or non-party witness, with both private parties and certain government agencies, including the FDA, DEA and SEC. For example, in 2018, several shareholders filed lawsuits and shareholder demands asserting that Akorn and its directors and officers violated Louisiana fiduciary duty law and federal securities laws. Other such matters include receiving and responding to inquiries and subpoenas from the U.S. Department of Justice - Antitrust Division, and U.S. and Department of Justice - Civil Division relating to industry drug pricing practices; being named defendants in a multidistrict litigation matter in the Eastern District of Pennsylvania relating to alleged price fixing by generic pharmaceutical manufactures; and DEA subpoenas. We incur substantial time and expense participating in these types of lawsuits and investigations, which also divert management's attention from ongoing business concerns and normal operations. In addition, these matters and any other substantial litigation may result in verdicts against us or government enforcement actions, which may include significant monetary awards, judgments invalidating certain of our intellectual property rights and preventing the manufacture, marketing and sale of our products. When such disputes are resolved unfavorably, our business, financial condition and results of operations are adversely affected. Any litigation, whether or not successful, may also damage our reputation. See Part II, Item 8, Note 19 - "Legal Proceedings.

Charges to earnings resulting from acquisitions could have a material adverse effect on our business, financial position and results of operations.

Under accounting principles generally accepted in the United States of America ("GAAP") business acquisition accounting standards, we recognize the identifiable assets acquired, the liabilities assumed, and any non-controlling interests in acquired companies generally at their acquisition date fair values and, in each case, separately from goodwill. Goodwill as of the acquisition date is measured as the excess amount of consideration transferred, which is also generally measured at fair value, and the net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain. After we complete an acquisition, the following factors could result in material charges and adversely affect our operating results and may adversely affect our cash flow:

- costs incurred to combine the operations of companies we acquire, such as transitional employee expenses and employee retention, redeployment or relocation expenses;
- impairment of goodwill or intangible assets;
- amortization of intangible assets acquired;
- a reduction in the useful lives of intangible assets acquired;
- identification of or changes to assumed contingent liabilities, including, but not limited to, contingent purchase price consideration, income tax contingencies and other non-income tax contingencies, after our final determination of the amounts for these contingencies or the conclusion of the measurement period (generally up to one year from the acquisition date), whichever comes first;
- charges to our operating results to eliminate certain duplicative pre-acquisition activities, to restructure our operations or to reduce our cost structure;
- charges to our operating results resulting from expenses incurred to effect the acquisition;
- changes to contingent consideration liabilities, including accretion and fair value adjustments. A significant portion of these adjustments could be accounted for as expenses that will decrease our net income and earnings per share for the periods in which those costs are incurred.

Such charges could cause a material adverse effect on our business, financial position, results of operations and/or cash flow, and could cause the price of our common stock to decline.

As of December 31, 2018, we had $283.9 million and $285.0 million of Goodwill and Intangible assets, net, respectively on our consolidated balance sheet. During 2018 and 2017, we recorded impairments of Intangible assets of $231.1 million and $128.1 million, respectively.

John N. Kapoor, Ph.D., through his stock ownership and his right to nominate up to three directors, could have an adverse effect on the price of our common stock and have substantial influence over our business strategies and policies.

John N. Kapoor, Ph.D., is a principal shareholder. As of December 31, 2018, Dr. Kapoor beneficially owns approximately 23% of our common stock. In addition, through the Kapoor Trust and EJ Financial, Dr. Kapoor is entitled to nominate up to three persons to serve on our Board. Mr. Brian Tambi was nominated for these purposes. The other seats for nomination are vacant. Nomination of any directors to our Board or any trading of our common stock by Dr. Kapoor and his related parties could have an adverse effect on the price of our common stock and an adverse effect on our business.

Risks Related to Our Industry.

Many of the raw materials and components used in our products come from a single source, the loss of any of which could have a material adverse effect on our business.

We require raw materials and components to manufacture and package pharmaceutical products. The principal components of our products are active and inactive pharmaceutical ingredients and certain packaging materials. Many of these materials are available from only a single source and, in the case of many of our products, only one supplier of raw materials has been identified and qualified. Because FDA approval of drugs requires manufacturers to specify their proposed suppliers of active ingredients and certain packaging materials in their applications, FDA approval of any new supplier would be required if such active ingredients or such packaging materials were no longer available from the specified supplier. The qualification of a new supplier could delay our development and marketing efforts. If for any reason we are unable to obtain sufficient quantities of any of the raw materials or components required to produce and package our products, we may not be able to manufacture our products as planned.

Sales of our products may be adversely affected by further consolidation of our customer base, which may have a material adverse effect on our business, financial position and results of operations.

Drug wholesalers, drug retailers, and group purchasing organizations have undergone, and are continuing to undergo, significant consolidation. Such consolidation has provided and may continue to provide them with additional purchasing leverage, and consequently may increase the pricing pressures that we face. Our net revenue and quarterly growth comparisons may be affected by fluctuations in the buying patterns of retail chains, major distributors and other trade buyers, whether resulting from seasonality, pricing, wholesaler buying decisions or other factors. In addition, since such a significant portion of our revenues is derived from relatively few customers, any financial difficulties experienced by a single customer, or any delay in receiving payments from a single customer, could have a material adverse effect on our business, results of operations and financial condition.

Our branded products may become subject to increased generic competition.

Trends moving toward increased substitution and reimbursement of generics for cost-containment purposes may reduce and limit the sales of our off-patent branded products. For example, our branded product Cosopt® PF faced generic competition in late 2018. Increased focus by the FDA on approval of generics may accelerate this trend.

Changes in technology could render our products obsolete.

The pharmaceutical industry is characterized by rapid technological change. The products that we sell today and their drug delivery methods may be replaced by more effective methods to deliver the same care, rendering our current products obsolete. Further, the technologies that we invest in for future use may not become the preferred method of delivery.

Risks Related to Regulations.

We are subject to extensive government regulations. When regulations change or we fall out of compliance, we can face increased costs, additional obligations, fines, or halts to our operations.

New, modified and additional regulations, statutes or legal interpretation, which occur from time to time among other things, require changes to manufacturing methods, expanded or different labeling, recall, replacement or discontinuation of certain products, additional record keeping procedures, expanded documentation of the properties of certain products and additional scientific substantiation. Such changes or new legislation can have a material adverse effect on our business, financial condition and results of operations. Certain of the regulatory risks that we are subject to are outlined below:

We and our third-party manufacturers are subject to periodic inspection by the FDA to assure regulatory compliance regarding the manufacturing, distribution, and promotion of pharmaceutical products. The FDA imposes stringent mandatory requirements on the manufacture and distribution of pharmaceutical products to ensure their safety and efficacy. The FDA also

regulates drug labeling and the advertising of prescription drugs. A finding by a governmental agency or court that we are not in compliance with FDA requirements could have a material adverse effect on our business, financial condition and results of operations.

As previously disclosed in various reports filed with the SEC, the Company, with the assistance of outside consultants, has been investigating alleged breaches of FDA data integrity requirements relating to product development at the Company. The Company has informed the FDA regarding the investigation and will continue to update the FDA as it proceeds. During 2018, we had FDA inspections at our Decatur and Somerset facilities that resulted in Official Action Indicated ("OAI") facility status and we received a warning letter in early 2019 related to the 2018 Decatur inspection. In 2018, significant costs were incurred to address the FDA observations from the inspections of our Decatur and Somerset facilities. If we are unable to adequately address the FDA's concerns in a timely manner, the FDA may take further actions and our pipeline product approvals may be further delayed.

We must obtain approval from the FDA for each prescription pharmaceutical product that we market and the timing of such approval process is unknown and uncertain. The FDA approval process is typically lengthy, and approval is never certain. Our new products could take a significantly longer time than we expect to gain regulatory approval and may never gain approval. Even if the FDA or another regulatory agency approves a product, the approval may limit the indicated uses for a product, may otherwise limit our ability to promote, sell and distribute a product or may require post-marketing studies or impose other post-marketing obligations, which could have a material adverse effect on marketability and profitability of the new products.

We are subject to recalls and other enforcement actions by the FDA. The FDA or other government agencies having regulatory authority over pharmaceutical products may request us to voluntarily or involuntarily conduct product recalls due to disputed labeling claims, manufacturing issues, quality defects or for other reasons. Restriction or prohibition on sales, halting of manufacturing operations, recalls of our pharmaceutical products or other enforcement actions could have a material adverse effect on our business, financial condition and results of operations. Further, such actions, in certain circumstances, may constitute an event of default under the terms of our various financing arrangements.

If the FDA changes its regulatory policies, it could force us to delay or suspend our manufacturing, distribution or sales of certain products. FDA interpretations of existing or pending regulations and standards may change over time with the advancement of associated technologies, industry trends, or prevailing scientific rationale. If the FDA changes its regulatory policies due to such factors, it could result in delay or suspension of the manufacturing, distribution or sales of certain of our products. In addition, modifications or enhancements of approved products are in many circumstances subject to additional FDA approvals which may or may not be granted and which may be subject to a lengthy application process. Any change in the FDA's enforcement policy or any decision by the FDA to require an approved application for one of our products not currently subject to the approved application requirements or any delay in the FDA approving an application for one of our products could have a material adverse effect on our business, financial condition and results of operations.

We are subject to extensive DEA regulation, which could result in our being fined or otherwise penalized if we are in non-compliance. The DEA could limit or reduce the amount of controlled substances that we are permitted to manufacture and market or issue fines and penalties against us for non-compliance with DEA regulations, which could have a material adverse effect on our business, financial condition and results of operations.

Our inability to timely and adequately address FDA warning letter and OAI facility status may adversely affect our business.

During 2018, we had FDA inspections at our Decatur and Somerset facilities that resulted in OAI facility status and we received a warning letter in early 2019 related to the 2018 Decatur inspection. If we are unable to adequately address the FDA's concerns in a timely manner, the FDA may take further actions and our pipeline product approvals may be further delayed.

Changes in healthcare law and policy may adversely affect our business and results of operations.

The sales of our products depend in part on the availability of reimbursement from third-party payers such as government health administration authorities, private health insurers, health maintenance organizations including Pharmacy Benefit Managers ("PBMs") and other healthcare-related organizations. We expect both federal and state governments in the U.S. and foreign governments to continue to propose and pass new legislation, rules and regulations designed to contain or reduce the cost of healthcare. Existing regulations that affect the price of pharmaceutical and other medical products may also change before any of our products are approved for marketing. Cost control initiatives could decrease the price that we receive for any

product we develop in the future. In addition, PBMs and other third-party payers are increasingly challenging the price and cost-effectiveness of medical products and services. Significant uncertainty exists as to the reimbursement status of newly approved pharmaceutical products. Our products may not be considered cost effective, or adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize a return on our investments. Any such changes in healthcare law or policy may harm our ability to market our products and generate profits.

The FDA may require us to stop marketing certain unapproved drugs, which could have a material adverse effect on our business, financial position and results of operations.

We market several generic prescription products that do not have formal FDA approvals. These products are non-application drugs that are manufactured and marketed without formal FDA approval on the basis of their having been marketed by the pharmaceutical industry prior to the 1962 Amendments of the FDC Act. The FDA has increased its efforts to require companies to file and seek FDA approval for unapproved products, and when a product is approved, the FDA has typically increased its effort to remove other unapproved products from the market by issuing notices to companies currently manufacturing these products to cease its distribution of said products. In 2013, we discontinued marketing of a previously unapproved product after receipt of notice from the FDA. During 2018, we marketed six such unapproved products, generating net revenue of approximately $48.5 million.

Any failure to comply with the complex reporting and payment obligations under Medicare, Medicaid and other government programs may result in litigation or sanctions.

We are subject to various federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback, false claims, marketing and pricing laws. We are also subject to Medicaid and other government reporting and payment obligations that are highly complex and at times ambiguous. Violations of these laws and reporting obligations are punishable by criminal or civil sanctions and exclusion from participation in federal and state healthcare programs such as Medicare and Medicaid. In 2013, the Attorney General of the State of Louisiana filed a lawsuit against Hi-Tech Pharmacal and numerous other pharmaceutical companies alleging that the defendants violated Louisiana state laws in connection with Medicaid reimbursement for certain vitamins, dietary supplements, and other products that were allegedly ineligible for reimbursement. In 2017, a similar lawsuit was filed by the State of Mississippi against the Company. If our past, present or future operations are found to be in violation of any of the laws described above or other similar governmental regulations, we may be subject to the applicable penalty associated with the violation, which could adversely affect our ability to operate our business and negatively impact our financial results. Further, if there is a change in laws, regulations or administrative or judicial interpretations, we may have to change our business practices or our existing business practices could be challenged as unlawful, which could materially adversely affect our business, financial position and results of operations.

Failure to comply with the U.S. Foreign Corrupt Practices Act could subject us to, among other things, penalties and legal expenses that could harm our reputation and have a material adverse effect on our business, financial condition and operating results.

The Company and its employees are subject to the FCPA, which generally prohibits covered entities and their intermediaries from engaging in bribery or making other prohibited payments to foreign officials for the purpose of obtaining or retaining business or other benefits. In addition, the FCPA imposes recordkeeping standards and requirements on publicly traded U.S. corporations and their foreign affiliates, which are intended to prevent the diversion of corporate funds to the payment of bribes and other improper payments, and to prevent the establishment of “off books” slush funds from which such improper payments can be made. If our employees, third-party sales representatives or other agents are found to have engaged in such practices, we could suffer severe penalties, including criminal and civil penalties, disgorgement and other remedial measures, including further changes or enhancements to

our procedures, policies and controls, as well as potential personnel changes and disciplinary actions.

The FDA may authorize sales of some prescription pharmaceuticals on a non-prescription basis, which may reduce the profitability of our prescription products.

The FDA may change the designation of some prescription pharmaceuticals we currently sell to non-prescription. If we are unable to gain approval of our product on a non-prescription designation we may experience an adverse effect on our business.

Risks Related to Financing.

We may not be able to extend or replace the JPM Revolving Facility.

The JPM revolving facility while undrawn, provides a source of liquidity for the Company. This facility matures on April 17, 2019. If the Company is unable to extend or replace it prior to that time, this source of liquidity will no longer be available to the Company unless the Company is thereafter able to replace it with similar financing and there is no assurance that it would be able to do so on favorable terms if at all.

Events of default may occur under our debt instruments. If events of default occur and lenders under these debt instruments accelerate the obligations thereunder we may not be able to repay the obligations that become immediately due and the holders of our debt instruments may seek to assert their rights under the debt instruments.

Events of default may occur under our debt instruments. If events of default occur and lenders under these debt instruments accelerate the obligations thereunder we may not be able to repay the obligations that become immediately due. The terms of our Loan Agreement and Credit Agreement require us to remain in compliance with certain covenants. In the event that an event of default has occurred, the loans thereunder may become accelerated and immediately due. If we are not successful in refinancing our debt or accessing additional liquidity, we may not be able to fund all our commitments and will be in default under these obligations. If we do not have sufficient funds on hand to pay our debt when due, we may be required to seek a waiver or amendment from our lenders, refinance our indebtedness, incur additional indebtedness, sell assets or sell additional securities. No assurance can be given that we will be able to obtain a waiver or amendment from our lenders if needed or that other financing will be available on terms that are acceptable to us or at all. Any failure to meet our obligations under our debt instruments could have a material negative impact on our liquidity and on our business.

Our indebtedness reduces our financial and operating flexibility.

We have entered into various credit arrangements to fund certain of our operations and activities, principally acquisitions. As of December 31, 2018, our debt includes The Existing Term loan and Incremental Term Loan, collectively the “Term Loans,” with a remaining principal balance of $831.9 million. We also have available borrowing capacity under our credit facilities (See Part II, Item 8, Note 7 - “Financing Arrangements” for definitions and descriptions of our Term Loans and our credit facilities). A high level of indebtedness subjects us to a number of risks. In particular, a significant portion of our current indebtedness has variable interest terms meaning we are subject to the risks associated with higher interest rates, and moreover, a high level of indebtedness may impair our ability to obtain additional financing in the future and increases the risk that we may default on our debt obligations. In addition, our current debt arrangements require that we devote a significant portion of our cash flows to service amounts outstanding under those debt arrangements. We also are subject to various covenants with respect to our indebtedness, including the obligation to meet certain defined financial ratios and our ability to pay distributions to our shareholders is restricted. Further, our indebtedness may restrict or otherwise impair our ability to raise additional capital through other debt financing, which could restrict our ability to grow our business. Our ability to meet our debt obligations, to comply with all required covenants, and to reduce our level of indebtedness depends on our future performance. General economic conditions and financial, business and other factors affect our operations and our future performance. Many of these factors are beyond our control. If we do not have sufficient funds on hand to pay our debt when due, we may be required to seek a waiver or amendment from our lenders, refinance our indebtedness, incur additional indebtedness, sell assets or sell additional shares of securities. We may not be able to complete such transactions on terms acceptable to us, or at all. Our failure to generate sufficient funds to pay our debts or to undertake any of these actions successfully could result in a default on our debt obligations, which would materially adversely affect our business, results of operations and financial condition.

We may not generate cash flow sufficient to pay interest and make required principal repayments on our Term Loans.

The outstanding balance of the Term Loans, which was $831.9 million as of December 31, 2018, is due and payable on April 17, 2021. If we do not generate sufficient operating cash flows to fund these payments or obtain additional

funding from external sources at acceptable terms, we may not have sufficient funds to satisfy our principal and interest payment obligations when those obligations are due, which would place us into default under the terms of the Existing Term Loan and the Incremental Term Loan. Such default would have a material adverse effect on our business, financial condition and results of operations. Further, our borrowings are secured by all or substantially all of the Company's assets. If the Company defaults on its obligations under the Existing Term Loan or the Incremental Term Loans, the lenders may be able to foreclose upon its security interest and otherwise be entitled to obtain or control Company assets. The lenders may also be able to negotiate significant increases in interest rates and fees.

We may need to obtain additional capital to grow our business, which could restrict our ability to operate in a manner we deem to be in our best interest.

We may require additional funds in order to materially grow our business. We require substantial liquidity to implement long-term cost savings and productivity improvement plans, continue capital spending to improve our manufacturing facilities

to increase capacity and support product development programs, meet scheduled term debt and lease maturities, to effect acquisitions and to run our normal business operations. We may seek additional funds through public and private financing, including equity and debt offerings. However, adequate funds through the financial markets or from other sources may not be available to us when needed or on favorable terms. Without sufficient additional capital funding, we may be required to delay, scale back or abandon some or all of our product development, manufacturing, acquisition, licensing and marketing initiatives, or operations. Further, such additional financing, if obtained, may require the granting of rights, preferences or privileges senior to those of the common stock and result in substantial dilution of the existing ownership interests of the common stockholders and could include covenants and restrictions that limit our ability to operate or expand our business in a manner that we deem to be in our best interest.

Risks Related to Our Intellectual Property.

Third parties may claim that we infringe their proprietary rights and may prevent or delay us from manufacturing and selling some of our new products.

The manufacture, use and sale of new products that are the subject of conflicting patent rights have been the subject of substantial litigation in the pharmaceutical industry. Pharmaceutical companies with patented brand products frequently sue companies that file applications to produce generic equivalents of their patented brand products for alleged patent infringement or other violations of intellectual property rights, which may delay or prevent the entry of such generic products into the market. Generally, a generic drug may not be marketed until the applicable patent(s) on the brand name drug expire or are held to be not infringed, invalid, or unenforceable. When we or our development partners submit a filing to the FDA for approval of a generic drug, we or our development partners must certify: (i) that there is no patent listed by the FDA as covering the relevant brand product, (ii) that any patent listed as covering the brand product has expired, (iii) that the patent listed as covering the brand product will expire prior to the marketing of the generic product, in which case the filing will not be finally approved by the FDA until the expiration of such patent, or (iv) that any patent listed as covering the brand drug is invalid or will not be infringed by the manufacture, sale or use of the generic product for which the filing is submitted.

Under any circumstance in which an act of infringement is alleged to occur, there is a risk that a brand pharmaceutical company may sue us for alleged patent infringement or other violations of intellectual property rights. Also, competing pharmaceutical companies may file lawsuits against us or our strategic partners alleging patent infringement or may file declaratory judgment actions of non-infringement, invalidity, or unenforceability against us relating to our own patents. We have been sued for patent infringement related to several of our filings and we anticipate that we may be sued once we file for other products in our pipeline. Such litigation is often costly and time-consuming and could result in a substantial delay in, or prevent the introduction and/or marketing of our products, allow for damages for any at-risk launches, which could have a material adverse effect on our business, financial condition and results of operations.

Even if the parties settle their intellectual property disputes through licensing or similar arrangements, the costs associated with these arrangements may be substantial and could include ongoing royalties, and the necessary licenses might not be available to us on terms we believe to be acceptable.

Our patents and proprietary rights may be challenged, circumvented or otherwise compromised by competitors, which may result in our protected products losing their market exclusivity and becoming subject to generic competition before their patents expire.

The patent and proprietary rights position of competitors in the pharmaceutical industry generally is highly uncertain, involves complex legal and factual questions, and is the subject of much litigation. There can be no assurance that any patent applications or other proprietary rights, including licensed rights, relating to our potential products or processes

will result in patents being issued or other proprietary rights secured, or that the resulting patents or proprietary rights, if any, will provide protection against competitors who: (i) successfully challenge our patents or proprietary rights; (ii) obtain patents or proprietary rights that may have an adverse effect on our ability to conduct business; or (iii) are able to circumvent our patent or proprietary rights position. It is possible that other parties have conducted or are conducting research and could make discoveries of pharmaceutical formulations or processes that would precede any discoveries made by us, which could prevent us from obtaining patent or other protection for these discoveries or marketing products developed therefrom. Consequently, others could independently develop pharmaceutical products similar to or rendering obsolete those that we are planning to develop, or duplicate any of our products. Our inability to obtain patents for, or other proprietary rights in, our products and processes or the ability of competitors to circumvent or cause to be obsolete our patents or proprietary rights could have a material adverse effect on our business, financial condition and results of operations. Additionally, our inability to successfully defend the existing patents on our products against Paragraph IV challenges by competing drug companies could have a material adverse effect on our business, financial condition and results of operations. For example, the patents that protect Azasite® that will

expire in March 2019, were challenged by two generic competitors. We settled with one competitor and the courts found in our favor with the other. Additionally, the Zioptan™ patents faced challenges from two generic competitors. We ultimately reached settlements with both competitors.

Further, the majority of the drug products that we market are generics, with essentially no patent or proprietary rights attached. While this fact allowed us the opportunity to obtain FDA approval to market our generic products, it also allows competing drug companies to do the same. Should multiple additional drug companies choose to develop and market the same generic products that we actively market, our profit margins could decline, which would have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Common Stock.

The issuance of shares related to the Company’s various stock plans may have a substantial dilutive effect on our common stock.

As of December 31, 2018, holders of unvested restricted stock units would receive 1.6 million shares of our common stock should all their restricted stock units vest. If the price per share of our common stock at the time of exercise of any stock options is in excess of the various exercise prices of such options, exercise of such options would have a dilutive effect on our common stock. As of December 31, 2018, holders of our outstanding options would receive 3.4 million shares of our common stock at a weighted average exercise price of $28.55 per share.

Our announced stock repurchase program could affect the price of our common stock and increase volatility and may be suspended or terminated at any time, which may result in a decrease in the trading price of our common stock.

In July 2016, the Board authorized a stock repurchase program (the "Stock Repurchase Program") that would allow the Company to effect repurchases from time to time in the open market, in privately negotiated transactions or otherwise, including accelerated stock repurchase arrangements. During 2016, the Company repurchased a total of approximately 1.8 million shares at an average price of $24.89 per share of common stock. The timing and actual number of shares repurchased under the Stock Repurchase Program has depended on a variety of factors, including the timing of open trading windows, price, corporate and regulatory requirements and other market conditions. Any repurchases pursuant to such program could affect our stock price and increase its volatility. The existence of a stock repurchase program could also cause our stock price to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our stock. There can be no assurance that any stock repurchases will occur or that if they do, that they will enhance stockholder value as the market price of our common stock may decline below the levels at which we repurchased shares of common stock. In addition, short-term stock price fluctuations could reduce the program’s effectiveness.

We may issue preferred stock and the terms of such preferred stock may reduce the market value of our common stock.

We are authorized to issue up to a total of 5 million shares of preferred stock in one or more series subject to certain limitations, without further action by holders of our common stock. If we did issue shares of preferred stock, it could affect the rights or reduce the market value of our common stock. In particular, specific rights granted to future holders of preferred stock could be used to restrict our ability to merge with or sell our assets to a third party. These terms may include voting rights, preferences as to dividends and liquidation, conversion and redemption rights and sinking fund provisions.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our manufacturing facilities in Decatur, Illinois, Amityville, New York, Somerset, New Jersey and Hettlingen, Switzerland are expected to be adequate to accommodate our current manufacturing needs.

Owned Locations

As of December 31, 2018, the Company owns three facilities in Decatur, Illinois. The Wyckles Road facility, which consists of 105,000 square feet of building space, is used for packaging, warehousing, distribution, and office space. The Company also owns approximately 7 acres of additional currently undeveloped land adjacent to the Wyckles facility. The Grand Avenue facility is a 123,000 square-foot facility for manufacturing, laboratories and office space. A third facility is a 750 square-foot storage unit. The Decatur facilities support the Prescription Pharmaceuticals and Consumer Health segments.

The Company owns five buildings in Hettlingen, Switzerland which support the Prescription Pharmaceuticals and Consumer Health segments with approximately 50,000 square-feet of manufacturing, office and storage space, and approximately 0.5 acres of additional currently undeveloped land.

The Company owns seven facilities in Amityville and Copiague, New York, with a total of approximately 219,000 square-feet. These facilities support the Prescription Pharmaceuticals and Consumer Health segments:

- 42,000 square-foot facility dedicated to liquid and semi-solid production,
- 29,000 square-foot facility housing a sterile manufacturing facility, DEA manufacturing, chemistry and microbiology laboratories,
- 65,000 square-foot facility used for warehousing finished goods,
- 22,000 square-foot facility with 4,000 square feet of office space and 18,000 square feet of warehouse space,
- 8,000 square-foot office building utilized for administrative functions,
- 35,000 square-foot facility with mixed office, laboratory and manufacturing space,
- 18,000 square-foot building with mixed office and laboratory space. (Operations relocated to Cranbury)

The Company owns approximately 380,000 square feet of pharmaceutical manufacturing, warehousing and distribution facilities situated on approximately 14 acres of land in Paonta Sahib, Himachal Pradesh, India.

Leased Locations

The Company leases four facilities in Somerset, New Jersey. One is a 50,000 square-foot facility used for drug manufacturing, research and development and administrative activities related to our Prescription Pharmaceuticals segment. The second facility is a 15,000 square foot facility used for a quality laboratory and additional office space. The third facility is a 6,600 square foot on-site warehouse, and the fourth facility is a 52,000 square-foot warehouse. The Company also leases a facility in Cranbury, New Jersey that is approximately 48,000 square feet used for research and development activities and a 3,000 square-foot laboratory space in Winterthur, Switzerland.

Our corporate headquarters and administrative offices consist of 70,000 square feet of leased space in two office buildings in Lake Forest, Illinois. In Gurnee, Illinois, we lease approximately 161,000 square feet of space for our product warehousing and distribution needs. In Vernon Hills, Illinois, the Company leases approximately 28,000

square feet of space for research and development activities.

Our subsidiary, Akorn Consumer Health, maintains its corporate offices in a 3,200-square foot leased facility in Ann Arbor, Michigan.

In India, the Company leases approximately 9,000 square feet of warehouse and office space.

Item 3. Legal Proceedings.

Legal proceedings which may have a material effect on the Company have been further disclosed in Part II, Item 8, Note 19 - “Legal Proceedings” and are herein incorporated by reference.

Item 4. Mine Safety Disclosures.

Not applicable.

Executive Officers of the Company

The following table identifies our current executive officers, the positions they hold as of February 20, 2019, and the year in which they became an officer. Our officers are appointed by the Board to hold office until their successors are elected and qualified.

Name	Position	Age	Year Became Officer
Douglas S. Boothe	President and Chief Executive Officer (“CEO”)	55	2019
Duane A. Portwood	Executive Vice President and Chief Financial Officer (“CFO”)	52	2015
Joseph Bonaccorsi	Executive Vice President, General Counsel, and Secretary (“General Counsel”)	54	2009
Randall E. Pollard	Senior Vice President, Finance, and Chief Accounting Officer ("CAO")	47	2015
Jonathan Kafer	Executive Vice President and Chief Commercial Officer	55	2016
Christopher C. Young	Executive Vice President, Global Operations	47	2019

Douglas S. Boothe. Mr. Boothe was named President and Chief Executive Officer of Akorn as of January 1, 2019. Prior to joining Akorn, Boothe most recently served as president of the generics division of publicly held Impax Laboratories, which developed, manufactured and marketed bioequivalent pharmaceuticals and was acquired by Amneal Pharmaceuticals LLC. Prior to Impax Laboratories, Mr. Boothe was the executive vice president and general manager of Perrigo Company Plc, with responsibility for the U.S. pharmaceuticals business, which included generics and specialty pharmaceutical products. He also served as the CEO of Actavis Inc., the U.S. manufacturing and marketing division of Actavis Group, and held senior positions at Alpharma and Pharmacia Corp. Following Mr. Boothe’s time at Impax Laboratories, he served as principal consultant for his own consulting company, Channel Advantage Consulting LLC. Mr. Boothe received his undergraduate degree from Princeton University and his MBA from the Wharton School of Business at the University of Pennsylvania.

Duane A. Portwood. Mr. Portwood joined Akorn in 2015 as the Executive Vice President and Chief Financial Officer. He previously worked for The Home Depot, Inc., where he was their Vice President & Corporate Controller since 2006. In that role, he was responsible for all of Home Depot’s accounting and financial reporting functions, as well as its financial operations and internal controls. Prior to Home Depot, Mr. Portwood served with the Wm. Wrigley Jr. Company from 1999 to 2006 in a number of accounting and finance leadership roles of increasing responsibility, most recently as Corporate Controller. Mr. Portwood began his career with Price Waterhouse LLP, where he held numerous leadership positions in their audit and transaction support practices. Mr. Portwood, previously a Certified Public Account, holds an M.B.A. with Honors from the University of Chicago Booth School of Business and a B.S. in Business Administration from the University of Montana.

Joseph Bonaccorsi. Mr. Bonaccorsi, Executive Vice President, General Counsel and Secretary, joined Akorn in 2009. Mr. Bonaccorsi came to Akorn from Walgreen Co., where he served as Senior Vice President Mergers & Acquisition and Counsel for the Walgreens-Option Care Home Care division. Mr. Bonaccorsi joined Option Care, Inc. in 2002, where he served as Senior Vice President, General Counsel, Secretary and Corporate Compliance Officer through 2007. Prior to joining Option Care, Inc., he was in private law practice in Chicago, Illinois. He received his B.S. degree from Northwestern University and his Juris Doctorate from Loyola University School of Law, Chicago.

Randall E. Pollard. Mr. Pollard joined Akorn in 2015 as Vice President, Corporate Controller and is currently serving as Senior Vice President, Finance, and Chief Accounting Officer. Mr. Pollard joined Akorn from Novartis Pharmaceuticals, where he most recently served as the head of accounting and reporting for Novartis' generic division, Sandoz. During his tenure at Novartis, Mr. Pollard also served as Controller of the Sandoz division. Prior to Novartis/Sandoz, he had served in various financial leadership roles at Wyeth Pharmaceutics and Mayne Pharma. Mr. Pollard began his career in public accounting at Arthur Andersen. Mr. Pollard is a Certified Public Accountant and holds a B.S. in Accounting from Pennsylvania State University and an M.B.A. from Fairleigh Dickinson University.

Jonathan Kafer. Mr. Kafer joined Akorn in 2015 as Executive Vice President, Sales and Marketing and was promoted to Chief Commercial Officer effective as of December 10, 2018. Mr. Kafer joined Akorn from Allergan, Inc., where he was previously the Vice President, Account Management. At Allergan, Mr. Kafer was responsible for all trade activity within Allergan's wholesale, retail specialty pharmacy, e-Solutions and managed market channels for all of Allergan's business units. Prior to Allergan, Mr. Kafer was the Vice President of Sales and Marketing for Health Systems at Teva Pharmaceuticals. Mr. Kafer has also served in various senior management roles at AAIPharma, Xanodyne Pharmaceuticals, HealthNexis and Novartis. Mr. Kafer holds a B.A. in Organizational Communications from The Ohio State University.

Christopher C. Young. Mr. Young was appointed Executive Vice President, Global Operations, effective January 24, 2019. Mr. Young brings twenty-five years of pharmaceutical experience to Akorn having most recently been the Executive Vice President of Global Operations for Alvogen, Inc. from 2013 to 2018. Prior to Alvogen, Mr. Young was Vice President of Operations in the United States and India for Actavis. Mr. Young received his undergraduate degree from Gettysburg College and his MBA from Rutgers University.

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

From February 7, 2007 to date, our common stock has been listed on the NASDAQ Global Select Market under the symbol “AKRX”.

As of February 20, 2019, there were 125,577,671 shares of our common stock outstanding, held by 250 stockholders of record. This number does not include stockholders for which shares are held in a “nominee” or “street” name. The closing price of our common stock on February 20, 2019 was $4.04 per share.

The Company did not pay cash dividends in 2018, 2017 or 2016 and does not expect to pay dividends on its common stock in the foreseeable future. Moreover, we may be restricted or limited from making dividend payments pursuant to the terms of our financing arrangements with certain other financial institutions (see Item 8, Note 7 - "Financing Arrangements”).

The Company did not repurchase any of its common stock during 2018 or 2017. During 2016, the Company repurchased a total of approximately 1.8 million shares at an average price of $24.89 per share of common stock. See Item 8, Note 20 - "Share Repurchases" for further information. The following table sets forth the summary of the Company's repurchase activity during each quarter in 2016.

Period	Total Number of Shares Repurchased	Average Price Paid per Share (including commission costs)	Cumulative Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Dollar Value of Shares that may yet be Purchased under the Plans or Programs
September 1-30, 2016	901,382	$ 27.74	901,382	$174,995,663
November 1-30, 2016	906,451	$ 22.06	1,807,833	$154,999,354
Total	1,807,833	$ 24.89	1,807,833	$154,999,354

PERFORMANCE GRAPH

The following Stock Performance Graph and related information shall not be deemed “soliciting material” or “filed” with the Securities and Exchange Commission, nor should such information be incorporated by reference into any future filings under the Securities Act of 1933 or the Securities Exchange Act of 1934, each as amended, except to the extent that we specifically incorporate it by reference in such filing.

The graph below compares the cumulative shareholder return on our common stock with the NASDAQ Composite Index (ticker symbol: ^IXIC) and the NASDAQ Health Care Index (ticker symbol: ^IXHC) over the last five years through December 31, 2018. The graph assumes $100 was invested in our common stock, as well as the two indices presented, at the end of December 2012 and that all dividends were reinvested during the subsequent five-year period.

Total Return Chart	2013	2014	2015	2016	2017	2018
NASDAQ Composite Index (^IXIC)	100	113	120	129	153	159
NASDAQ Health Care Index (^IXHC)	100	128	137	114	138	133
Akorn, Inc. (AKRX)	100	147	152	89	131	14

Item 6. Selected Financial Data

The following table sets forth selected summary historical financial data. We have prepared this table using our consolidated financial statements for the five years ended December 31, 2018. Our consolidated financial statements upon which the selected summary historical financial data is derived were audited by BDO USA, LLP (“BDO”), independent registered public accounting firm, during each of the five years ended December 31, 2018, 2017, 2016, 2015 and 2014. Certain prior-period amounts have been reclassified to conform to current-period presentation including cost of sales, selling, general and administrative expenses, research and development expenses, impairment of intangible assets, litigation rulings and settlements and other non-operating (expense) income, net on the consolidated statements of comprehensive (loss) income, as well as Fin 48 reserve and accrued legal fees and contingencies on the consolidated balance sheet. This summary should be read in conjunction with our audited Consolidated Financial Statements and Notes thereto, and "Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations" and other financial information included herein.

	Years Ended December 31,				
	2018 (2)	2017	2016	2015 (1)	2014 (1)
(In thousands, except per share data)					
Revenues	$694,018	$841,045	$1,116,843	$985,076	$555,048
Gross profit	246,016	432,206	673,512	595,243	261,360
Operating (loss) income	(388,426)	(22,884)	322,858	288,172	60,816
Interest expense, net, amortization of deferred financing costs and other non-operating income (expense), net	(49,756)	(36,314)	(51,558)	(56,016)	(35,474)
Pretax (loss) income from operations	(438,182)	(59,198)	271,300	232,156	25,342
Income tax (benefit) provision from operations	(36,273)	(34,648)	87,057	81,358	10,954
(Loss) income from operations	$(401,909)	$(24,550)	$184,243	$150,798	$14,388
Weighted average shares outstanding:					
Basic	125,383	124,790	122,869	116,980	103,480
Diluted	125,383	124,790	125,801	125,762	109,588
PER SHARE:					
Equity, per diluted share	$3.54	$6.66	$6.51	$4.94	$3.25
(Loss) income from operations per share:					
Basic	$(3.21)	$(0.20)	$1.50	$1.29	$0.14
Diluted	$(3.21)	$(0.20)	$1.47	$1.22	$0.13
Share Price: High	$33.63	$34.00	$39.46	$57.10	$45.25
Low	$3.16	$17.74	$17.57	$19.08	$20.52
BALANCE SHEET DATA:					
Current assets	$583,819	$730,151	$685,811	$708,132	$437,750
Net property, plant & equipment	334,853	313,418	238,404	179,614	144,196
Total assets	$1,495,257	$1,909,511	$1,973,720	$2,042,545	$1,832,150
Current liabilities	$170,823	$171,089	$175,555	$231,376	$150,853
Long-term obligations, less current installments	880,568	907,177	978,981	1,189,604	1,324,990
Shareholders' equity	$443,866	$831,245	$819,184	$621,565	$356,307
CASH FLOW DATA:					
Cash (used in) provided by operating activities	$(68,894)	$247,633	$166,690	$299,031	$43,390
Cash used in investing activities	$(69,131)	$(90,555)	$(72,922)	$(53,718)	$(966,874)
Cash (used in) provided by financing activities	$(5,038)	$7,594	$(240,333)	$31,908	$963,116
Effect of changes in exchange rates	$(1,032)	$1,183	$2	$(251)	$(183)
Decrease/(increase) in cash and cash equivalents	$(144,095)	$165,855	$(146,563)	$276,970	$39,449

(1) Years 2014 and 2015 include the effects of acquisitions such as Akorn AG (January 2, 2015), VersaPharm (August 12, 2014) and Hi-Tech Pharmacal Co., Inc. (April 17, 2014).

(2) Operating loss for 2018 and 2017, include total intangible asset impairment amounts of $231.1 million and $128.1 million, respectively.

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

OVERVIEW

We, together with our wholly-owned subsidiaries, are a specialty generic pharmaceutical company that develops, manufactures and markets generic and branded prescription pharmaceuticals, branded and private-label OTC consumer health products and animal health pharmaceuticals. We are an industry leader in the development, manufacturing and marketing of specialized generic pharmaceutical products. As such, we specialize in difficult-to-manufacture sterile and non-sterile dosage forms including, but not limited to, ophthalmics, injectables, oral liquids, otics, topicals, inhalants and nasal sprays.

We have identified two reportable segments:

- Prescription Pharmaceuticals, we manufacture and market generic and branded prescription pharmaceuticals including ophthalmics, injectables, oral liquids, otics, topical, inhalants, and nasal sprays.
- Consumer Health, we manufacture and market branded and private-label animal health and OTC products.

For a more detailed description of the products and customers that comprise our reportable segments, see Part I, Item 1 - Business.

New Product Development:

During the year ended December 31, 2018, we submitted two new Abbreviated New Drug Application ("ANDA") filings to the FDA. In the prior year ended December 31, 2017, we submitted five ANDA filings while in 2016 we submitted 12 ANDA filings and three Abbreviated New Animal Drug Application ("ANADA") filings to the FDA.

Akorn and its partners received eight ANDA product approvals from the FDA in the year ended December 31, 2018; 26 ANDA approvals and one New Drug Application ("NDA") approval in 2017 and finally, seven ANDA approvals and three tentative ANDA approvals in 2016. As of December 31, 2018, we had 62 ANDA filings under FDA review.

We plan to continue to regularly submit additional filings based on perceived market opportunities and our R&D pipeline, as well as review existing filings for commercial viability. We continue to develop new products internally; as well as partner with other drug companies for products that we would not intend to manufacture ourselves. Our R&D expense in the year ended December 31, 2018 was $47.3 million as compared to $45.0 million in the prior year ended December 31, 2017. This includes internal and external R&D expenses and milestone fees paid to our strategic partners.

Revenue & Gross Profit:

Net revenue was $694.0 million for the twelve month period ended December 31, 2018, representing a decrease of $147.0 million, or 17.5%, as compared to net revenue of $841.0 million for the twelve month period ended December 31, 2017. The decrease in net revenue in the period was primarily due to $157.4 million decline in organic revenue. The $157.4 million decline in organic revenue was due to approximately $117.1 million and $40.4 million declines in volume declines and price erosion, respectively. Gross profit for the twelve month period ended December 31, 2018 was $246.0 million, or 35.4% of revenue, compared to $432.2 million, or 51.4% of revenue, for the twelve month period ended December 31, 2017. The decline in the gross profit percentage was principally due to unfavorable product mix shifts primarily driven by the effect of competition on Ephedrine Sulfate Injection and Nembutal Injection, unfavorable variances due to decreased production resulting from extended planned shutdowns at our Decatur and Somerset manufacturing facilities, as well as increased operating costs associated with FDA compliance

related improvement activities.

Sales Practices:

From time to time we offer incentives, such as extended payment terms or discounts, to support the launch of new products. We believe these practices are consistent with industry practice. For all sales under which these incentives were provided during the periods presented in this Management's Discussion & Analysis, revenue received from such sales was properly accounted for in accordance with ASC 606 — "Revenue Recognition" and was recognized in the proper applicable accounting period.

RESULTS OF OPERATIONS

For the years 2018, 2017 and 2016, we have identified and reported operating results for two distinct business segments: Prescription Pharmaceuticals and Consumer Health. Our reported results by segment are based upon various internal financial reports that disaggregate certain operating information. Our Chief Operating Decision Maker ("CODM"), as defined in Accounting Standards Codification (“ASC”) Topic 280, Segment Reporting, is our Chief Executive Officer (CEO). Our CEO oversees operational assessments and resource allocations based upon the results of our reportable segments, all of which have available discrete financial information (See Item 8, Note 12 – “Segment Information” for further discussion).

The following table sets forth amounts and percentages of total revenue for certain items from our Consolidated Statements of Comprehensive Income and our segment reporting information for the years ended December 31, 2018, 2017 and 2016 (in thousands):

	2018		2017		2016	
	Amount	% of Revenue	Amount	% of Revenue	Amount	% of Revenue
Revenues:						
Prescription Pharmaceuticals	$620,669	89.4 %	$772,524	91.9 %	$1,053,579	94.3 %
Consumer Health	73,349	10.6 %	68,521	8.1 %	63,264	5.7 %
Total revenues	694,018	100.0 %	841,045	100.0 %	1,116,843	100.0 %
Gross profit and gross margin percentage:						
Prescription Pharmaceuticals	213,560	34.4 %	402,082	52.0 %	644,319	61.2 %
Consumer Health	32,456	44.2 %	30,124	44.0 %	29,193	46.1 %
Total gross profit	246,016	35.4 %	432,206	51.4 %	673,512	60.3 %
Operating expenses:						
Selling, general & administrative expenses	279,628	40.3 %	216,324	25.7 %	197,631	17.7 %
Acquisition-related costs	121	— %	159	— %	364	— %
Research and development expenses	47,321	6.8 %	44,988	5.3 %	38,753	3.5 %
Amortization of intangibles	53,472	7.7 %	61,443	7.3 %	65,713	5.9 %
Impairment of intangible assets	231,086	33.3 %	128,127	15.2 %	44,369	4.0 %
Litigation rulings and settlements	22,814	3.3 %	4,049	0.5 %	3,824	0.3 %
Operating (loss) income	$(388,426)	(56.0)%	$(22,884)	(2.7)%	$322,858	28.9 %
Net (loss) income	$(401,909)	(57.9)%	$(24,550)	(2.9)%	$184,243	16.5 %

COMPARISON OF YEARS ENDED DECEMBER 31, 2018 AND 2017

Net revenue was $694.0 million for the twelve month period ended December 31, 2018, representing a decrease of $147.0 million, or 17.5%, as compared to net revenue of $841.0 million for the twelve month period ended December 31, 2017. The decrease in net revenue in the period was primarily due to $157.4 million decline in organic revenue that was partially offset by $14.8 million of new product revenue. The $157.4 million decline in organic revenue was due to approximately $117.1 million, or 13.9%, and $40.4 million, or 4.8% in volume and price declines, respectively. The organic revenue decline was principally due to the effect of competition on Ephedrine Sulfate Injection, Nembutal, Lidocaine Ointment and Clobetasol Cream. In addition, the Company experienced lower net revenue as a result of supply shortfalls from extended planned shutdowns at our Decatur and Somerset manufacturing facilities during the year. While the Company received eight new-to-Akorn ANDA product approvals and launched or relaunched four new products during 2018, it was unable to offset the overall net revenue decline through new product launches or new business opportunities.

The Prescription Pharmaceuticals segment revenues of $620.7 million for the twelve month period ended December 31, 2018 represented a decrease of $151.8 million, or 19.7%, as compared to revenues of $772.5 million for twelve month period ended December 31, 2017.

The Consumer Health segment revenues of $73.3 million for the twelve month period ended December 31, 2018 represented an increase of $4.8 million, or 7.0%, as compared to revenues of $68.5 million for twelve month period ended December 31, 2017.

The net revenue for the twelve month period ended December 31, 2018 of $694.0 million was net of adjustments totaling $1,193.8 million for chargebacks, rebates, administrative fees and others, product returns, discounts and allowances and advertising, promotions and other. Chargeback expenses for 2018 were $830.0 million, or 44.0% of gross sales, compared to $953.3 million, or 40.5% of gross sales, in 2017. The $123.3 million decrease in chargeback expense was due to lower gross sales in the current year as compared to prior year. Rebates, administrative fees and other expenses for the twelve month period ended December 31, 2018 were $297.8 million, or 15.8% of gross sales, compared to $476.6 million, or 20.3% for twelve month period ended December 31, 2017. The $178.8 million decrease in rebates, administrative fees and other expenses was primarily due to volume declines as well as product mix and customer mix. Our product returns provision for the twelve month period ended December 31, 2018 was $20.2 million, or 1.1% of gross sales, compared to $26.9 million, or 1.1% of gross sales, for twelve month period ended December 31, 2017. Discounts and allowances were $36.9 million or 2.0% of gross sales for the twelve month period ended December 31, 2018, compared to $45.3 million, or 1.9% of gross sales for the twelve month period ended December 31, 2017. Advertisement and promotion expenses were $8.9 million or 0.5% of gross sales for the twelve month period ended December 31, 2018, compared to $7.9 million, or 0.3% of gross sales for the twelve month period ended December 31, 2017.

Gross profit for the twelve month period ended December 31, 2018 was $246.0 million, or 35.4% of revenue, compared to $432.2 million, or 51.4% of revenue, for the twelve month period ended December 31, 2017. The decline in the gross profit percentage was principally due to unfavorable product mix shifts primarily driven by the effect of competition on Ephedrine Sulfate Injection and Nembutal Injection, unfavorable variances due to decreased production resulting from extended planned shutdowns at our Decatur and Somerset manufacturing facilities, as well as increased operating costs associated with FDA compliance related improvement activities.

Total operating expenses were $634.4 million in the twelve month period ended December 31, 2018, an increase of $179.4 million, or 39.4%, from the comparative prior year period amount of $455.1 million. The $179.4 million increase was primarily driven by respective increases, $103.0 million, $63.3 million and $18.8 million in Impairment of intangible assets, Selling, general and administrative (“SG&A”) expenses and Litigation rulings and settlement expenses that were partially offset by a decrease of $8.0 million in Amortization of intangibles. The following is a discussion of the main drivers of the increase:

Impairments of intangible assets were $231.1 million in 2018, an increase of $103.0 million or 80.4% over the prior year amount of $128.1 million. The $103.0 million increase was primarily as a result of anticipated market conditions upon launch resulting in lower expected market share and lower average selling price, which reduced the viability for future development. As a result, the cost to get these products to market outweighed the benefits resulting in increased IPR&D impairments of $114.9 million that was partially offset by a decrease in Product licensing rights impairments of $11.9 million.

SG&A expenses were $279.6 million in 2018, an increase of $63.3 million, or 29.3%, over the prior year expenses of $216.3 million. The primary drivers of the $63.3 million increase were $36.0 million legal expenses attributed to the Delaware Action and $27.9 million expenses related to the data integrity assessment projects, $6.2 million severance packages for the former executives and $6.1 million of fixed assets impairments. These were partially offset by a decrease of $18.3 million in restatement related expenses.

Litigation rulings and settlements were $22.8 million in 2018, an increase of $18.8 million, from the comparative prior year period amount of $4.0 million. The primary drivers of the $18.8 million increase were $10.5 million related to an intermediate appellate decision for damages in a product liability case, $5.0 million related to a legal settlement accrual, and $3.8 million for an adverse arbitration decision related to a contract dispute in the third quarter of 2018.

Non-operating expenses were $49.8 million in 2018, an increase of $13.5 million, or 37.2%, over the prior year expenses of $36.3 million. The $13.5 million increase was primarily driven by $11.4 million increase in interest expense related to higher interest rates in 2018 compared to the prior year in 2017, and $3.0 million income attributed to receipt and subsequent sale of the Nicox securities that the Company received as a milestone payment in the second quarter of 2017.

Income tax benefit was $36.3 million based on an effective tax provision rate of approximately 8.3% in 2018, compared to an income tax benefit of $34.6 million in 2017 based on an effective tax provision rate of approximately 58.5%. The change in the tax rate experienced by the company was driven principally by a full valuation allowance of $60.6 million recorded against US, India, and Switzerland deferred tax assets and shortfalls and forfeitures related to stock compensation. A $3.0 million benefit also resulted from the re-measurement of U.S. deferred tax assets and liabilities at the lower enacted corporate tax rate included in the Tax Cuts and Jobs Act (the “Tax Act”). In the absence of the changes in the Tax Act, our tax benefit for 2018 would have been $33.2 million, with an effective tax provision rate of approximately 7.6%. The Company’s foreign subsidiaries do not have accumulated earnings that they can distribute; therefore, the provisions of the Tax Act that related to

the repatriation of foreign earnings are not applicable to the Company at December 31, 2018. The benefit resulting from the re-measurement of U.S. deferred tax assets and liabilities was partially offset by an accrual of $15.7 million of penalties and interest in 2017 and an additional accrual of $7.9 million of penalties and interest in 2018 that could result from adverse results of income tax examinations. Absent the effects of both the reduction in our deferred tax liability and the accrual of the penalties and interest, the income tax rate would have been approximately 9.4%.

The Company reported a net loss of $401.9 million for the twelve month period ended December 31, 2018, or 57.9% of net revenue, compared to net loss of $24.6 million, for the twelve month period ended December 31, 2017 or 2.9% of net revenue.

COMPARISON OF YEARS ENDED DECEMBER 31, 2017 AND 2016

Net revenue was $841.0 million for the twelve month period ended December 31, 2017, representing a decrease of $275.8 million, or 24.7%, as compared to net revenue of $1,116.8 million for the twelve month period ended December 31, 2016. The decrease in net revenue in the period was primarily due to $279.1 million decline in organic revenue. The $279.1 million decline in organic revenue was due to approximately $192 million and $87 million declines in volume and price erosion, respectively. The organic revenue decline was principally due to the effect of competition on Ephedrine Sulfate Injection, as well as Lidocaine Ointment. Additionally, other key products, such as Progesterone and Clobetasol Ointment, experienced more significant than expected declines in net revenue as a result of increased competition consistent with observed industry trends in 2017. In addition, the Company experienced more than normal supply disruptions for certain products during the year, resulting in lower net revenue. While the Company received 26 new-to-Akorn ANDA product approvals and launched 21 new products during 2017, it was unable to offset the overall net revenue decline through new product launches or new business opportunities.

The Prescription Pharmaceuticals segment revenues of $772.5 million for the twelve month period ended December 31, 2017 represented a decrease of $281.1 million, or 26.7%, as compared to revenues of $1,053.6 million for twelve month period ended December 31, 2016.

The Consumer Health segment revenues of $68.5 million for the twelve month period ended December 31, 2017 represented an increase of $5.3 million, or 8.3%, as compared to revenues of $63.3 million for twelve month period ended December 31, 2016.

The net revenue for the twelve month period ended December 31, 2017 of $841.0 million was net of adjustments totaling $1,510.0 million for chargebacks, rebates, administrative fees and others, product returns, discounts and allowances and advertising, promotions and other. Chargeback expenses for 2017 were $953.3 million, or 40.5% of gross sales, compared to $1,218.6 million, or 42.1% of gross sales, in 2016. The $265.2 million decrease in chargeback expense was due to lower gross sales in the current year as compared to prior year. Rebates, administrative fees and other expenses for the twelve month period ended December 31, 2017 were $476.6 million, or 20.3% of gross sales, compared to $463.7 million, or 16.0% for twelve month period ended December 31, 2016. The $12.9 million increase in rebates, administrative fees and other expenses was due to the impact of product and customer mix. Our product returns provision for the twelve month period ended December 31, 2017 was $26.9 million, or 1.1% of gross sales, compared to $28.3 million, or 1.0% of gross sales, for twelve month period ended December 31, 2016. Discounts and allowances were $45.3 million or 1.9% of gross sales for the twelve month period ended December 31, 2017, compared to $55.5 million, or 1.9% of gross sales for the twelve month period ended December 31, 2016. Advertisement and promotion expenses were $7.9 million or 0.3% of gross sales for the twelve month period ended December 31, 2017, compared to $8.4 million, or 0.3% of gross sales for the twelve month period ended December 31, 2016.

Gross profit for the twelve month period ended December 31, 2017 was $432.2 million, or 51.4% of revenue, compared to $673.5 million, or 60.3% of revenue, for the twelve month period ended December 31, 2016. The decline in the gross profit percentage was principally due to unfavorable product mix shifts primarily driven by the effect of competition on one of our major products.

Total operating expenses were $455.1 million in the twelve month period ended December 31, 2017, an increase of $104.4 million, or 29.8%, from the comparative prior year period amount of $350.7 million. The $104.4 million increase was primarily driven by respective increases of $83.7 million and $18.7 million in Impairment of intangible assets and Selling, general and administrative ("SG&A") expenses. The following is a discussion of the main drivers of the increase:

Impairments of intangible assets were $128.1 million in 2017, an increase of $83.8 million or 188.8% over the prior year amount of $44.4 million. The $83.8 million increase was primarily as a result of anticipated market conditions upon launch resulting in lower expected market share and lower average selling price, which reduced the viability for future

development. As a result, the cost to get these products to market outweighed the benefits resulting in increased IPR&D impairments of $20.7 million and Product licensing rights impairments of $63.0 million.

SG&A expenses were $216.3 million in 2017, an increase of $18.7 million, or 9.5%, over the prior year expenses of $197.6 million. The primary drivers of the $18.7 million increase were $15.4 million in marketing and advertising expenses in 2017, of which $13.1 million was related to the TheraTears® direct-to-consumer ("DTC") advertising campaign, $7.9 million expenses related to the proposed Merger between Fresenius Kabi and Akorn, Inc., $7.5 million of net increase in Other SG&A expenses and $4.2 million increase in legal and audit expenses, which are being partially offset by a $16.9 million decrease in restatement related expenses.

During 2017, the Company incurred non-operating expenses totaling $36.3 million compared to $51.6 million during 2016. The $15.3 million decrease was primarily driven by respective decreases of $5.6 million, $4.7 million and $4.5 million in amortization of deferred financing costs, interest expense, net and other non-operating income (expense), net. The main drivers of the net decrease were comprised of the following:

Amortization of deferred financing costs totaled approximately $5.2 million in 2017, a decrease of $5.6 million as compared to the $10.8 million recognized in 2016. The decrease in deferred financing costs in the year was principally due to 2016 expense including a deferred financing fee write-down associated with $200.0 million principal repayment of the Term loans in February 2016.

Interest expense, net was $38.1 million in 2017, compared to $42.7 million in 2016. The decrease in 2017 was primarily due to increased capitalized interest and the effects of the conversion of the Convertible Notes on June 1, 2016.

Income tax benefit was $34.6 million based on an effective tax provision rate of approximately 58.5% in 2017, compared to an income tax expense of $87.1 million in 2016 based on an effective tax provision rate of approximately 32.1%. The change in the tax rate experienced by the company was driven principally by $26.9 million tax benefit resulting from the re-measurement of U.S. deferred tax assets and liabilities at the lower enacted corporate tax rate included in the Tax Cuts and Jobs Act (the “ Tax Act”). In the absence of the changes in the Tax Act, our tax benefit for 2017 would have been $7.7 million, with an effective tax provision rate of approximately 13.1%. The Company’s foreign subsidiaries do not have accumulated earnings that they can distribute; therefore, the provisions of the Act that related to the repatriation of foreign earnings are not applicable to the Company at December 31, 2017. The benefit resulting from the re-measurement of U.S. deferred tax assets and liabilities was partially offset by an accrual of $15.7 million of penalties and interest that could result from adverse results of income tax examinations. Absent the effects of both the reduction in our deferred tax liability and the accrual of the penalties and interest, the income tax rate would have been approximately 39.5%.

The Company reported a net loss of $24.6 million for the twelve month period ended December 31, 2017, or 2.9% of net revenue, compared to net income of $184.2 million, for the twelve month period ended December 31, 2016 or 16.5% of net revenue.

FINANCIAL CONDITION AND LIQUIDITY

Cash and Cash Equivalents

As of December 31, 2018, we had cash and cash equivalents of $224.9 million, which is $143.2 million lower than our cash and cash equivalents balance of $368.1 million as of December 31, 2017. This decrease in 2018 cash and cash equivalents was driven by investing cash outflows of $69.1 million, operating cash outflows of $68.9 million and financing cash outflows of $5.0 million. Our net working capital was $413.0 million at December 31, 2018, compared

to $559.1 million at December 31, 2017, a decrease of $146.1 million.

Operating Cash Flows

	Year ended December 31,		
	2018	2017	2016
OPERATING ACTIVITIES:			
Net (loss) income	$(401,909)	$(24,550)	$184,243
Adjustments to reconcile consolidated net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	82,805	85,173	87,963
Impairment of intangible assets	231,086	128,127	44,369
Fixed asset impairment	6,135	—	—
Amortization of deferred financing fees	5,216	5,216	10,760
Non-cash stock compensation expense	21,503	21,018	15,412
Non-cash interest expense	—	—	777
Income from available-for-sale securities	—	(3,032)	—
Deferred income taxes, net	(37,396)	(115,249)	(32,934)
Gain on sale of available-for-sale security	—	199	45
Other	421	(307)	(4,888)
Changes in operating assets and liabilities:			
Trade accounts receivable, net	(11,627)	141,979	(132,617)
Inventories, net	9,694	(8,367)	10,208
Prepaid expenses and other current assets	3,847	(12,232)	(7,262)
Other non-current assets	(3,120)	(3,519)	(301)
Trade accounts payable	(5,002)	(9,223)	6,139
Accrued legal fees and contingencies	24,120	21,492	711
FIN 48 Reserve	9,690	38,999	(984)
Accrued expenses and other liabilities	(4,357)	(18,091)	(14,951)
NET CASH (USED IN) PROVIDED BY OPERATING ACTIVITIES	$(68,894)	$247,633	$166,690

During 2018, we used $68.9 million in cash flow from operations. This negative operating cash flow was primarily driven by a net loss of $401.9 million and a $37.4 million decrease in deferred income taxes, partially offset by add-backs of impairment of intangible assets of $231.1 million, add-backs of depreciation and amortization of $82.8 million, accrued legal fees of $24.1 million, non-cash stock compensation expense of $21.5 million and $9.7 million related to FIN48 reserve, which mainly represents uncertain tax position regarding the reserve for chargebacks & rebates, penalties and interest for the change from accrual basis to cash basis.

During 2017, we generated $247.6 million in cash flow from operations. This positive operating cash flow was primarily driven by a decrease of $142.0 million in trade accounts receivable, net, add-backs of impairment of intangible assets of $128.1 million and add-backs of depreciation and amortization of $85.2 million, partially offset by a net loss of $24.6 million and a reduction in net deferred tax liabilities of $115.2 million.

During 2016, we generated $166.7 million in cash flow from operations. This positive operating cash flow was primarily driven by net income of $184.2 million, add-backs of depreciation and amortization of $88.0 million, intangible asset impairments of $44.4 million and amortization of deferred financing fees of $10.8 million, non-cash stock compensation expense of $15.4 million and a $10.2 million decrease in inventories, net, partially offset by a $132.6 million increase in trade accounts receivable, net, a $32.9 million decrease in deferred income taxes, net and $15.0 million related to a decrease in accrued expenses and other liabilities.

Investing Cash Flows

	Year ended December 31,		
	2018	2017	2016
INVESTING ACTIVITIES:			
Proceeds from disposal of assets	$30	$4,815	$5,966
Payments for other intangible assets	(50)	(200)	(3,950)
Purchases of property, plant and equipment	(69,111)	(95,170)	(74,938)
NET CASH USED IN INVESTING ACTIVITIES	$(69,131)	$(90,555)	$(72,922)

During 2018, we used $69.1 million of cash in investing activities. Of this total, $69.1 million was used to acquire property, plant and equipment. The decrease in net cash used in investing activities during 2018 compared to 2017, was primarily driven by a decrease of approximately $17.5 million in capital spending related to our ongoing effort to comply with the Federal Drug Supply Chain Security Act ("DSCSA").

During 2017, we used $90.6 million of cash in investing activities. Of this total, $95.2 million was used to acquire property, plant and equipment. This use of cash was partially offset by $4.8 million of inflows from the sales of investments in available-for-sale securities and disposal of fixed assets. The increase in net cash used in investing activities during 2017 compared to 2016, was primarily driven by an increase of approximately $18.0 million in capital spending related to our ongoing effort to comply with the DSCSA.

During 2016, we used $72.9 million of cash in investing activities. Of this total, $74.9 million was used to acquire property, plant and equipment, and $4.0 million was used for the payment of other intangible assets. These uses of cash were partially offset by $6.0 million received in proceeds related to the disposition of assets during the year.

Financing Cash Flows

	Year ended December 31,		
	2018	2017	2016
FINANCING ACTIVITIES:			
Proceeds under stock option and stock purchase plans	$546	$9,320	$11,291
Stock compensation plan withholdings from employee taxes	(777)	(1,726)	(1,496)
Payments of contingent acquisition liabilities	(4,793)	—	—
Debt financing costs	—	—	(5,128)
Common stock repurchases	—	—	(45,000)
Lease Payments	(14)	—	—
Debt repayment	—	—	(200,000)
NET CASH (USED IN) PROVIDED BY FINANCING ACTIVITIES	$(5,038)	$7,594	$(240,333)

During 2018, financing activities used $5.0 million of cash. $4.8 million was used for payments of contingent acquisition liabilities. During 2017, financing activities generated $7.6 million of cash from the employee stock option exercise proceeds. During 2016, financing activities used $240.3 million of cash of which $200.0 million was specifically used to repay debt, $45.0 million was used to purchase Akorn shares of common stock under our Stock Repurchase Program and $5.1 million was spent on debt financing costs. These uses were partially offset by $9.8 million of proceeds under stock option and stock purchase plans.

Liquidity and Capital Needs

We require certain capital resources in order to operate our business. The company has incurred and expects in 2019 to continue to incur significant costs related to consultants assisting with cGMP improvements. Our future capital expenditures may include substantial projects undertaken to upgrade, expand and improve our manufacturing facilities in the U.S. and Switzerland. Our cash obligations include the principal and interest payments due on our Term Loans

and any amount we may borrow under the JPMorgan Facility (as both described throughout this report). Also, costs related to ongoing legal matters may be significant (see Item 8, Note 19 - “Legal Proceedings” for further details). We believe that our cash reserves and operating cash flows will be sufficient to meet our cash needs for the foreseeable future.

Refer to Item 8, Note 7 - “Financing Arrangements” for further detail of debt obligations as of and for the year ended December 31, 2018.

CONTRACTUAL OBLIGATIONS

In order to support the continued increase in the number of relevant and marketable pharmaceutical products that we market and sell, we will from time to time partner with outside firms for the development of selected products. These development agreements frequently call for the payment of “milestone payments” as various steps in the process are completed in relation to product development and submission to the FDA for approval. The dollar amount of these payments is generally fixed contractually, assuming that the required milestones are achieved; however, the timing of such payments is contingent based on a variety of factors and is therefore subject to change. The amounts disclosed in the below table under the caption “Strategic partners - contingent payments” represents our best estimate of the amount and expected timing of the “milestone payments” and other fees we expect to pay to outside development partners based on our current contractual agreements with them. These milestone payments are accrued as liabilities on our balance sheets once the milestones have been achieved.

As more fully described under Part I, Item 2 - Properties, we currently lease the facilities that we occupy in Gurnee, Illinois, Lake Forest, Illinois and Vernon Hills, Illinois, as well as in Ann Arbor, Michigan, Somerset, New Jersey, Cranbury, New Jersey and India. We also lease various pieces of office equipment at these facilities, as well as at our manufacturing facilities in Decatur, Illinois and Amityville, New York. Our remaining obligations under these leases are summarized in the table below.

As of December 31, 2018, our principal outstanding debt obligation was related to our Term Loans. We had no outstanding loan balance under our JPM Credit Agreement at December 31, 2018, or any time since we entered into this agreement on April 17, 2014.

The following table details our future contractual obligations as of December 31, 2018 (in thousands):

Description	Total	2019	2020	2021	2022	2023	2024 and beyond
Term Loans due 2021 (1)	$831,938	$—	$—	$831,938	$—	$—	$—
Interest Payable – 8.06% existing and incremental term loan (2)	153,723	67,079	67,079	19,565	—	—	—
Estimated future pension benefit payments (3)	14,167	1,477	1,451	1,316	1,328	1,278	7,317
Inventory purchase commitments	8,647	3,452	2,957	280	280	280	1,398
Leases	26,867	4,564	4,647	4,283	3,724	2,673	6,976
Strategic partners – contingent payments (4)	12,998	4,658	3,890	2,650	1,800	—	—
Total:	$1,048,340	$81,230	$80,024	$860,032	$7,132	$4,231	$15,691

(1) As discussed further in Item 8, Note 7 - “Financing Arrangements,” on February 16, 2016 the Company voluntarily prepaid $200.0 million of cumulative Term Loans principal which eliminated any further interim principal repayment obligations.

(2) Interest on borrowings under these facilities are variable as calculated at our election, on an ABR rate or an adjusted LIBOR rate, plus a margin of 3.25% to 4.50% for ABR loans, and 4.25% to 5.50% for LIBOR loans with a current comprehensive rate of 8.06% as of December 31, 2018. The calculated interest payable amounts above assume the current comprehensive rate of 8.06% remains unchanged across the remaining term of the associated loan.

(3) The $7.3 million in the 2024 and beyond column represents estimated future pension benefit payments from 2024 through 2028 only.

(4) Note the strategic partner payments include our best estimates regarding if and when various contingencies and market opportunities will occur in 2019 and beyond.

OFF BALANCE SHEET ARRANGEMENTS

We have no significant off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that are material to our shareholders.

CRITICAL ACCOUNTING POLICIES

Our significant accounting policies and critical accounting estimates are described in Item 8, Note 2 - “Summary of significant accounting policies” to the Consolidated Financial Statements and are herein incorporated by reference.

RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Recently issued accounting pronouncements which may have an effect on the Company are described in Item 8, Note 15 - “Recently issued and adopted accounting pronouncements” to the Consolidated Financial Statements and are herein incorporated by reference.

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS

Recently adopted accounting pronouncements which have had an effect on the Company are described in Item 8, Note 15 - “Recently issued and adopted accounting pronouncements” to the Consolidated Financial Statements and are herein incorporated by reference.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

As of December 31, 2018, our principal debt obligations included the Term Loans with outstanding debt of $831.9 million. As of the date of the filing of this Form 10-K until the maturity of the Term Loans, our spread will be based upon the Ratings Level applicable on such date as documented below.

Ratings Level	Index Ratings (Moody's/S&P)	Eurodollar Spread	ABR Spread
Level I	B1/B+ or higher	4.25%	3.25%
Level II	B2/B	4.75%	3.75%
Level III	B3/B- or lower	5.50%	4.50%

As of December 31, 2018, we were party to the $150.0 million JPM Credit Agreement with JPMorgan providing for a revolving credit facility. Interest on borrowings under the JPM Credit Agreement were to be calculated at a premium above either the current prime rate or current LIBOR rates plus a margin determined in accordance with the Company’s consolidated fixed charge coverage ratio (earnings before interest, taxes, depreciation and amortization ("EBITDA") to fixed charges), exposing us to interest rate risk on such borrowings. As of December 31, 2018, we had no outstanding loans under the JPM Credit Agreement and no outstanding letter of credit under the JPM Credit Agreement.

Our Swiss subsidiary, Akorn AG, operates a manufacturing facility in Hettlingen, Switzerland. Accordingly, we are subject to foreign exchange risk based on changes in the exchange rate between U.S. dollars and Swiss Francs.

Our financial instruments include cash and cash equivalents, accounts receivable, available for sale securities and accounts payable. The fair values of cash and cash equivalents, accounts receivable and accounts payable approximate book value because of the short maturity of these instruments. Available for sale securities are stated at fair value

adjusted for certain lock-up provisions that prevent us from selling until a set period of time has elapsed.

At December 31, 2018, the majority of our cash and cash equivalents balance of $224.9 million was invested in overnight instruments, the interest rates of which may change daily.

Item 8. Financial Statements and Supplementary Data

The following financial statements are included in Part II, Item 8 of this Form 10-K.

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Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Akorn, Inc.
Lake Forest, Illinois

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Akorn, Inc. (the “Company”) and subsidiaries as of December 31, 2018 and 2017, the related consolidated statements of comprehensive (loss) income, shareholders’ equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and subsidiaries at December 31, 2018 and 2017, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated March 1, 2019 expressed an adverse opinion thereon.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

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

/s/ BDO USA, LLP
We have served as the Company's auditor since 2016.
Chicago, Illinois
March 1, 2019

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Akorn, Inc.
Lake Forest, Illinois

Opinion on Internal Control over Financial Reporting

We have audited Akorn, Inc.'s (the "Company's") internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). In our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company and subsidiaries as of December 31, 2018 and 2017, the related consolidated statements of comprehensive (loss) income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and our report dated March 1, 2019, expressed an unqualified opinion thereon.

Basis for Opinion

A company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness regarding management's failure to design and maintain internal controls over stock award modification accounting has been identified and described in management's assessment. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2018 financial statements, and this report does not affect our report dated March 1, 2019 on those financial statements.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those

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

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

/s/ BDO USA, LLP
Chicago, Illinois
March 1, 2019

AKORN, INC.
CONSOLIDATED BALANCE SHEETS
(In Thousands,
Except Share Data)

	December 31,	
	2018	2017
ASSETS		
CURRENT ASSETS		
Cash and cash equivalents	$224,868	$368,119
Trade accounts receivable, net	153,126	141,383
Inventories, net	173,645	183,568
Prepaid expenses and other current assets	32,180	37,081
TOTAL CURRENT ASSETS	583,819	730,151
PROPERTY, PLANT AND EQUIPMENT, NET	334,853	313,418
OTHER LONG-TERM ASSETS		
Goodwill	283,879	285,310
Intangible assets, net	284,976	569,484
Deferred tax assets	—	6,521
Other non-current assets	7,730	4,627
TOTAL OTHER LONG-TERM ASSETS	576,585	865,942
TOTAL ASSETS	$1,495,257	$1,909,511
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES		
Trade accounts payable	$39,570	$51,976
Purchase consideration payable	—	3,901
Income taxes payable	—	15,775
Accrued royalties	6,786	5,902
Accrued compensation	19,745	12,286
Accrued administrative fees	36,767	38,598
Accrued legal fees and contingencies	52,413	28,293
Accrued expenses and other liabilities	15,542	14,358
TOTAL CURRENT LIABILITIES	170,823	171,089
LONG-TERM LIABILITIES		
Long-term debt (net of non-current deferred financing costs)	820,411	815,195
Deferred tax liability	566	43,404
FIN 48 reserve	49,990	40,300
Other long-term liabilities	9,601	8,278
TOTAL LONG-TERM LIABILITIES	880,568	907,177
TOTAL LIABILITIES	1,051,391	1,078,266
SHAREHOLDERS' EQUITY		
Preferred stock, $1 par value —5,000,000 shares authorized; no shares issued or outstanding at December 31, 2018 and 2017	—	—
Common stock, no par value — 150,000,000 shares authorized; 125,492,373 and 125,090,522 shares issued and outstanding at December 31, 2018 and 2017	574,553	550,472
(Accumulated deficit) Retained earnings	(107,168)	294,741
Accumulated other comprehensive loss	(23,519)	(13,968)
TOTAL SHAREHOLDERS' EQUITY	443,866	831,245
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$1,495,257	$1,909,511

See notes to the consolidated financial statements.

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AKORN, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(In Thousands, Except Per Share Data)

	Year ended December 31,		
	2018	2017	2016
REVENUES	$694,018	$841,045	$1,116,843
Cost of sales (exclusive of amortization of intangibles, included within operating expenses below)	448,002	408,839	443,331
GROSS PROFIT	246,016	432,206	673,512
Selling, general and administrative expenses	279,628	216,324	197,631
Acquisition-related costs	121	159	364
Research and development expenses	47,321	44,988	38,753
Amortization of intangibles	53,472	61,443	65,713
Impairment of intangible assets	231,086	128,127	44,369
Litigation rulings and settlements	22,814	4,049	3,824
TOTAL OPERATING EXPENSES	634,442	455,090	350,654
OPERATING (LOSS) INCOME	(388,426)	(22,884)	322,858
Amortization of deferred financing costs	(5,216)	(5,216)	(10,791)
Interest expense, net	(45,900)	(38,070)	(42,734)
Other non-operating income (expense), net	1,360	6,972	1,967
(LOSS) INCOME BEFORE INCOME TAXES	(438,182)	(59,198)	271,300
Income tax (benefit) provision	(36,273)	(34,648)	87,057
NET (LOSS) INCOME	$(401,909)	$(24,550)	$184,243
NET (LOSS) INCOME PER COMMON SHARE:			
NET (LOSS) INCOME, BASIC	$(3.21)	$(0.20)	$1.50
NET (LOSS) INCOME, DILUTED	$(3.21)	$(0.20)	$1.47
SHARES USED IN COMPUTING NET (LOSS) INCOME PER COMMON SHARE:			
BASIC	125,383	124,790	122,869
DILUTED	125,383	124,790	125,801
COMPREHENSIVE (LOSS) INCOME:			
Net (loss) income	$(401,909)	$(24,550)	$184,243
Unrealized holding (loss) gain on available-for-sale securities, net of tax of $6, ($157) and ($436) for the years ended December 31, 2018, 2017 and 2016, respectively.	(21)	267	740
Foreign currency translation (loss) gain for the years ended December 31, 2018, 2017 and 2016, respectively.	(8,001)	6,150	(1,941)
Pension liability adjustment, net of tax of $389, ($403) and $694 for the year ended December 31, 2018, 2017 and 2016, respectively.	(1,529)	1,582	(3,624)
COMPREHENSIVE (LOSS) INCOME	$(411,460)	$(16,551)	$179,418

See notes to the consolidated financial statements.

AKORN, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2016, 2017 AND 2018
(In Thousands)

	Common Stock		Retained Earnings (Accumulated Deficit)	Other Compre-hensive Loss	Total
	Shares	Amount	Amount	Amount	Amount
BALANCES AT DECEMBER 31, 2015	119,427	$458,659	$ 180,048	$ (17,142)	$621,565
Net income	—	—	184,243	—	184,243
Common stock repurchases	(1,808)	—	(45,000)	—	(45,000)
Exercise of stock options	1,792	13,953	—	—	13,953
Restricted stock units	184	4,091	—	—	4,091
Stock-based compensation expense	—	11,321	—	—	11,321
Foreign currency translation loss	—	—	—	(1,941)	(1,941)
Excess tax benefit – stock compensation	(138)	(4,158)	—	—	(4,158)
Unrealized holding loss on available-for-sale securities	—	—	—	740	740
Convertible note conversions	4,933	43,215	—	—	43,215
Akorn AG pension liability adjustment	—	—	—	(3,624)	(3,624)
Other	—	(5,221)	—	—	(5,221)
BALANCES AT DECEMBER 31, 2016	124,390	$521,860	$ 319,291	$ (21,967)	$819,184
Net loss	—	—	(24,550)	—	(24,550)
Exercise of stock options	625	9,673	—	—	9,673
Restricted stock units	138	7,736	—	—	7,736
Stock-based compensation expense	—	13,282	—	—	13,282
Foreign currency translation gain	—	—	—	6,150	6,150
Stock compensation plan withholdings for employee taxes	(62)	(2,079)	—	—	(2,079)
Unrealized holding loss on available-for-sale securities	—	—	—	267	267
Akorn AG pension liability adjustment	—	—	—	1,582	1,582
BALANCES AT DECEMBER 31, 2017	125,091	$550,472	$ 294,741	$ (13,968)	$831,245
Net loss	—	—	(401,909)	—	(401,909)
Exercise of stock options	22	546	—	—	546
Employee stock purchase plan issuances	146	2,809	—	—	2,809
Compensation and share issuances related to restricted stock awards	288	11,673	—	—	11,673
Stock-based compensation expense	—	9,830	—	—	9,830
Foreign currency translation loss	—	—	—	(8,001)	(8,001)
Stock compensation plan withholdings for employee taxes	(55)	(777)	—	—	(777)
Unrealized holding loss on available-for-sale securities	—	—	—	(21)	(21)
Akorn AG pension liability adjustment	—	—	—	(1,529)	(1,529)
BALANCES AT DECEMBER 31, 2018	125,492	$574,553	$ (107,168)	$ (23,519)	$443,866

See notes to the consolidated financial statements.

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AKORN, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Thousands)

	Year ended December 31,		
	2018	2017	2016
OPERATING ACTIVITIES:			
Net (loss) income	$(401,909)	$(24,550)	$184,243
Depreciation and amortization	82,805	85,173	87,963
Impairment of intangible assets	231,086	128,127	44,369
Fixed asset impairment	6,135	—	—
Amortization of deferred financing fees	5,216	5,216	10,760
Non-cash stock compensation expense	21,503	21,018	15,412
Non-cash interest expense	—	—	777
Income from available-for-sale securities	—	(3,032)	—
Deferred income taxes, net	(37,396)	(115,249)	(32,934)
Gain on sale of available-for-sale security	—	199	45
Other	421	(307)	(4,888)
Changes in operating assets and liabilities:			
Trade accounts receivable, net	(11,627)	141,979	(132,617)
Inventories, net	9,694	(8,367)	10,208
Prepaid expenses and other current assets	3,847	(12,232)	(7,262)
Other non-current assets	(3,120)	(3,519)	(301)
Trade accounts payable	(5,002)	(9,223)	6,139
Accrued legal fees and contingencies	24,120	21,492	711
FIN 48 Reserve	9,690	38,999	(984)
Accrued expenses and other liabilities	(4,357)	(18,091)	(14,951)
NET CASH (USED IN) PROVIDED BY OPERATING ACTIVITIES	(68,894)	247,633	166,690
INVESTING ACTIVITIES:			
Proceeds from disposal of assets	30	4,815	5,966
Payments for other intangible assets	(50)	(200)	(3,950)
Purchases of property, plant and equipment	(69,111)	(95,170)	(74,938)
NET CASH USED IN INVESTING ACTIVITIES	(69,131)	(90,555)	(72,922)
FINANCING ACTIVITIES:			
Proceeds under stock option and stock purchase plans	546	9,320	11,291
Stock compensation plan withholdings from employee taxes	(777)	(1,726)	(1,496)
Payments of contingent acquisition liabilities	(4,793)	—	—
Debt financing costs	—	—	(5,128)
Common stock repurchases	—	—	(45,000)
Lease Payments	(14)	—	—
Debt repayment	—	—	(200,000)
NET CASH (USED IN) PROVIDED BY FINANCING ACTIVITIES	(5,038)	7,594	(240,333)
Effect of changes in exchange rates on cash and cash equivalents	(1,032)	1,183	2
(DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	(144,095)	165,855	(146,563)
CASH AND CASH EQUIVALENTS, AND RESTRICTED CASH AT BEGINNING OF YEAR	369,889	204,034	350,597
CASH AND CASH EQUIVALENTS, AND RESTRICTED CASH AT END OF YEAR	$225,794	$369,889	$204,034

See notes to the consolidated financial statements.

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AKORN, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Business and Basis of Presentation

Business: Akorn, Inc., together with its wholly-owned subsidiaries (collectively "Akorn," the "Company," "we," "our" or "us") is a specialty generic pharmaceutical company that develops, manufactures and markets generic and branded prescription pharmaceuticals and branded and private-label over-the-counter ("OTC") consumer health products and animal health pharmaceuticals. We are an industry leader in the development, manufacturing and marketing of specialized generic pharmaceutical products in alternative dosage forms. We specialize in difficult-to-manufacture sterile and non-sterile dosage forms including, but not limited to, ophthalmics, injectables, oral liquids, otics, topicals, inhalants and nasal sprays. In previous years, the Company completed numerous mergers, acquisitions, product acquisitions, which resulted in significant growth.

Akorn is a Louisiana corporation founded in 1971 in Abita Springs, Louisiana. In 1997, we relocated our corporate headquarters to the Chicago, Illinois area and currently maintain our principal corporate offices in Lake Forest, Illinois. We operate pharmaceutical manufacturing facilities in Decatur, Illinois; Somerset, New Jersey; Amityville, New York; Hettlingen, Switzerland; and Paonta Sahib, Himachal Pradesh, India. We operate a central distribution warehouse in Gurnee, Illinois and additional distribution facilities in Amityville, New York and Decatur, Illinois. Our research and development ("R&D") centers are located in Vernon Hills, Illinois and Cranbury, New Jersey. We maintain other corporate offices in Ann Arbor, Michigan and Gurgaon, Haryana, India.

Fresenius Kabi AG: On April 24, 2017, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement") with Fresenius Kabi AG, a German stock corporation ("Parent"), Quercus Acquisition, Inc., a Louisiana corporation and wholly-owned subsidiary of Parent ("Merger Sub") and, solely for purposes of Article VIII thereof, Fresenius SE & Co. KGaA, a German partnership limited by shares.

On April 22, 2018, Fresenius Kabi AG delivered to Akorn a letter purporting to terminate the Merger Agreement. On April 23, 2018, Akorn filed a verified complaint entitled Akorn, Inc. v. Fresenius Kabi AG, Quercus Acquisition, Inc. and Fresenius SE & Co. KGaA, in the Court of Chancery of the State of Delaware for breach of contract and declaratory judgment. The complaint sought, among other things, a declaration that Fresenius Kabi AG's termination was invalid, an order enjoining the defendants from terminating the Merger Agreement, and an order compelling the defendants to specifically perform their obligations under the Merger Agreement to use reasonable best efforts to consummate and make effective the Merger. On April 30, 2018, the defendants filed a verified counterclaim alleging that, due primarily to purported data integrity deficiencies, the Company had breached representations, warranties and covenants in the Merger Agreement, and that it had experienced a material adverse effect. The verified counterclaim sought, among other things, a declaration that defendants' purported termination of the Merger Agreement was valid and that defendants were not obligated to consummate the transaction, and damages.

On October 1, 2018, the Court of Chancery issued an opinion (the "Opinion") denying Akorn's claims for relief and concluding that Fresenius Kabi AG had validly terminated the Merger Agreement. The Court of Chancery concluded that Akorn had experienced a material adverse effect due to its financial performance following the signing of the Merger Agreement; that Akorn had breached representations and warranties in the Merger Agreement and that those breaches would reasonably be expected to give rise to a material adverse effect; that Akorn had materially breached covenants in the Merger Agreement; and that Fresenius was materially in compliance with its own contractual obligations. On October 17, 2018, the Court of Chancery entered partial final judgment against Akorn on its claims and in favor of the Fresenius parties on their claims for declaratory judgment. The Court of Chancery entered an order holding proceedings on the Fresenius parties' damages claims in abeyance pending the resolution of any appeal from

the partial final judgment.

On December 7, 2018, the Delaware Supreme Court affirmed the Court of Chancery's ruling denying Akorn's claims for declaratory and injunctive relief and granting Defendants' counterclaim for a declaration that the termination was valid. On December 27, 2018, the Delaware Supreme Court issued a mandate returning the case to the Court of Chancery for consideration of all remaining issues, including the Fresenius parties' damages claims.

On February 20, 2019, the Fresenius parties filed a motion for leave to amend and supplement their counterclaim. The Fresenius parties' proposed amended and supplemented counterclaim alleges that Akorn fraudulently induced Fresenius to enter into the Merger Agreement and thereafter willfully breached contractual representations and warranties and covenants therein. It seeks damages of approximately $102 million. On February 25, 2019, Akorn filed an opposition to the Fresenius parties' motion for leave to file an amended and supplemented counterclaim to the extent the Fresenius parties sought leave to assert a

cause of action for fraud. On February 27, 2019, the Fresenius parties filed a reply in further support of their motion to file an amended and supplemented counterclaim. On February 28, 2019, the Court of Chancery denied the Fresenius parties' motion for leave to file an amended and supplemented counterclaim. See Note 19 – Legal Proceedings.

The Company has considered the accounting and disclosure of events occurring after the balance sheet date of December 31, 2018 through the filing date of this Form 10-K.

Certain prior-period amounts have been reclassified to conform to current-period presentation including cost of sales, selling, general and administrative expenses, research and development expenses, impairment of intangible assets, litigation rulings and settlements and other non-operating (expense) income, net on the consolidated statements of comprehensive (loss) income, as well as Fin 48 reserve and accrued legal fees and contingencies on the consolidated balance sheet.

Note 2 — Summary of Significant Accounting Policies

Consolidation: The accompanying consolidated financial statements include the accounts of Akorn, Inc. and its wholly-owned domestic and foreign subsidiaries. All inter-company transactions and balances have been eliminated in consolidation, and the financial statements of Akorn India Private Limited ("AIPL") and Akorn AG have been translated from Indian Rupees to U.S. dollars and Swiss Francs to U.S. dollars, respectively, based on the currency translation rates in effect during the period or as of the date of consolidation, as applicable. The Company has no involvement with variable interest entities.

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

Significant estimates and assumptions for the Company relate to the allowances for chargebacks, rebates, product returns, coupons, promotions and doubtful accounts, as well as the reserve for slow-moving and obsolete inventories, the carrying value and lives of intangible assets, the useful lives of fixed assets, the carrying value of deferred income tax assets and liabilities, the assumptions underlying share-based compensation, and accrued but unreported employee benefit costs.

Going Concern: In connection with the preparation of the financial statements for the year ended December 31, 2018, the Company conducted an evaluation as to whether there were conditions and events, considered in the aggregate, which raised substantial doubt as to the entity's ability to continue as a going concern within one year after the date of the issuance, or the date of availability, of the financial statements to be issued, noting that there did not appear to be evidence of substantial doubt of the entity's ability to continue as a going concern.

Revenue Recognition: Revenue is recognized at a point in time upon the transfer of control of the Company's products, which occurs upon delivery for substantially all of the Company's sales. The promises within the contract that are distinct are primarily the Company's supply of products, which represents a single performance obligation. The consideration the Company receives in exchange for its goods or services is only recognized when it is probable that a significant reversal will not occur. The consideration to which the Company expects to be entitled includes a stated list price, less various forms of variable consideration. The Company makes significant estimates for related variable consideration at the point of sale, including chargebacks, rebates, product returns, other discounts and allowances. All sales taxes are excluded from the transaction price. The Company expenses contract fulfillment costs when incurred since the amortization period would have been less than one year. Payment terms are primarily less than 90 days. See

Note 15 – Recently Issued and Adopted Accounting Pronouncements for the discussion of the adoption of Accounting Standard Codification ("ASC") Topic 606 Revenue from Contracts with Customers.

Provision for estimated chargebacks, rebates, discounts, managed care rebates, product returns and doubtful accounts is made at the time of sale and is analyzed and adjusted, if necessary, at each balance sheet date.

Freight: The Company records shipping and handling expense related to product sales as cost of sales.

Cash and Cash Equivalents: The Company considers all unrestricted, highly liquid investments with maturity of three months or less when acquired, to be cash and cash equivalents. At December 31, 2018 and 2017, approximately $0.9 million and $1.8 million, respectively, of cash held by AIPL was restricted, and was reported within prepaid expenses and other current assets.

The following table sets forth the components of the Company's cash, cash equivalents, and restricted cash as reported in the consolidated statement of cash flows for the years ended December 31, 2018 and 2017 (in thousands):

Cash, Cash Equivalents, and Restricted Cash	Year Ended December 31,	
	2018	2017
Cash and cash equivalents	$224,868	$368,119
Restricted cash	926	1,770
Total cash, cash equivalents, and restricted cash	$225,794	$369,889

Accounts Receivable: Trade accounts receivable are stated at their net realizable value. The nature of the Company's business involves, in the ordinary course, significant judgments and estimates relating to chargebacks, coupon redemption, product returns, rebates, discounts given to customers and allowances for doubtful accounts. Certain rebates, chargebacks and other credits are recorded as deductions to the Company's trade accounts receivable where applicable, based on product and customer specific terms.

Unless otherwise noted, the provisions and allowances for the following customer deductions are reflected in the accompanying consolidated financial statements as reductions of revenues and trade accounts receivable, respectively.

Chargebacks: The Company enters into contractual agreements with certain third parties such as retailers, hospitals, group-purchasing organizations ("GPOs") and managed care organizations to sell certain products at predetermined prices. Similarly, we maintain an allowance for rebates and discounts related to billbacks, wholesaler fee for service contracts, GPO administrative fees, government programs, prompt payment and other adjustments with certain customers. Most of the parties have elected to have these contracts administered through wholesalers that buy the product from the Company and subsequently sell it to these third parties. As noted elsewhere, these wholesalers represent a significant percentage of the Company's gross sales. When a wholesaler sells products to one of these third parties that are subject to a contractual price agreement, the difference between the price paid to the Company by the wholesaler and the price under the specific contract is charged back to the Company by the wholesaler. This process typically takes four to six weeks, but for some products may extend out to twelve weeks. The Company tracks sales and submitted chargebacks by product number and contract for each wholesaler. Utilizing this information, the Company estimates a chargeback percentage for each product and records an allowance as a reduction to gross sales when the Company records its sale of the products. The Company reduces the chargeback allowance when a chargeback request from a wholesaler is processed. Actual chargebacks processed by the Company can vary materially from period to period based upon actual sales volume through the wholesalers. However, the Company's provision for chargebacks is fully reserved for at the time revenues are recognized.

Management obtains product inventory reports from certain wholesalers to aid in analyzing the reasonableness of the chargeback allowance and to monitor whether wholesaler inventory levels do not significantly exceed customer demand. The Company assesses the reasonableness of its chargeback allowance by applying a product chargeback percentage that is based on a combination of historical activity and future price and mix expectations to the quantities of inventory on hand at the wholesalers according to wholesaler inventory reports. In addition, the Company estimates the percent of gross sales generated through direct and indirect sales channels and the percent of contract vs. non-contract revenue in the period, as these each affect the estimated reserve calculation. In accordance with its accounting policy, the Company also estimates the percent of wholesaler inventory that will ultimately be sold to third parties that are subject to contractual price agreements based on a trend of such sales through wholesalers. The Company uses this percentage estimate until historical trends indicate that a revision should be made. On an ongoing basis, the Company evaluates its actual chargeback rate experience, and new trends are factored into its estimates each quarter as market conditions change.

For the year ended December 31, 2018, the Company incurred a chargeback provision of $830.0 million, or 44.0% of gross sales of $1,887.9 million, compared to $953.3 million, or 40.5% of gross sales of $2,351.1 million in the prior year. The dollar decrease and percent increase in the comparative period was the result of gross sales decreases and a change in contractual terms with a major customer in the first quarter of 2018. The Company ensures that this rate as a percent of gross sales is reasonable through inspection of contractual obligations, review of historical trends and evaluation of recent activity. Furthermore, other events that could materially alter chargeback rates include: changes in product pricing as a result of competitive market dynamics or negotiations with customers, changes in demand for specific products due to external factors such as competitor supply position or consumer preferences, customer shifts in

buying patterns from direct to indirect through wholesalers, which could either individually or in aggregate increase or decrease the chargeback rate depending on the direction and velocity of the change(s).

To better understand the impact of changes in chargeback reserve based on circumstances that are not fully outside of the Company's control, for instance, the ratio of sales subject to chargeback to indirect sales, the Company performs a sensitivity analysis. Holding all other assumptions constant, for a 140 basis point ("BP") change in the ratio of sales subject to chargeback to indirect sales would increase the chargeback reserve by $0.2 million or decrease the chargeback reserve by $0.6 million depending on the change in the direction of the ratio. Fundamentally, the BP change calculation is determined based on the six month trend of the average ratio of sales subject to chargeback to indirect sales. Due to the competitive generic pharmaceutical industry and our recent experience with wholesalers' strategy and shifts in contracted and non-contracted indirect sales, we believe that the six month trend of the proportion of direct to indirect sales provides a representative basis for sensitivity analysis.

Rebates, Administrative Fees and Others: The Company maintains an allowance for rebates, administrative fees and others, related to contracts and other rebate programs that it has in place with certain customers. Rebates, administrative fees and other percentages vary by product and by volume purchased by each eligible customer. The Company tracks sales by product number for each eligible customer and then applies the applicable rebate, administrative fees and other percentage, using both historical trends and actual experience to estimate its rebates, administrative fees and others allowances. The Company reduces gross sales and increases the rebates, administrative fees and others allowance by the estimated rebates, administrative fees and others amounts when the Company sells its products to eligible customers. The Company reduces the rebate allowance when it processes a customer request for a rebate. At each balance sheet date, the Company analyzes the allowance for rebates, administrative fees and others against actual rebates processed and makes adjustments as appropriate. The amount of actual rebates processed can vary materially from period to period as discussed below.

The allowances for rebates, administrative fees and others further takes into consideration price adjustments which are credits issued to reflect increases or decreases in the invoice or contract prices of the Company's products. In the case of a price decrease, a shelf-stock adjustment credit may be given for product remaining in customer's inventories at the time of the price reduction and is reserved at the point of sale. Contractual price protection results in a similar credit when the invoice or contract prices of the Company's products increase, effectively allowing customers to purchase products at previous prices for a specified period of time. Amounts recorded for estimated shelf-stock adjustments and price protection are based upon specified terms with customers, estimated changes in market prices, and estimates of inventory held by customers. The Company regularly monitors these and other factors and evaluates the reserve as additional information becomes available.

Similar to rebates, the reserve for administrative fees and others represents those amounts processed related to contracts and other fee programs which have been in place with certain entities, but they are settled through cash payment to these entities and accordingly are accounted for as a current liability. Otherwise, administrative fees and others operate similarly to rebates.

For the year ended December 31, 2018, the Company incurred rebates, administrative fees and others of $297.8 million, or 15.8% of gross sales of $1,887.9 million, compared to $476.6 million, or 20.3% of gross sales of $2,351.1 million in the prior year. The dollar and percent decreases from the comparative period were the result of gross sales decreases and product mix shifts to products with lower rebates, administrative fees and others expense percentages. Additionally, a change in contractual terms with a major customer in the first quarter of 2018 resulted in a decrease in rebates, which is also a contributing factor in the variances between the two periods compared. The Company ensures that this rate as a percent of gross sales is reasonable through inspection of contractual obligations, review of historical trends and evaluation of recent activity. Furthermore, other events that could materially alter rebates, administrative fees and others rates include: changes in product pricing as a result of competitive market dynamics or negotiations

with customers, changes in demand for specific products due to external factors such as competitor supply position or consumer preferences, customer shifts in buying patterns from direct to indirect through wholesalers, which could either individually or in aggregate increase or decrease the rebate rate depending on the direction and velocity of the change(s).

To better understand the impact of changes in reserves for rebates, administrative fees and others based on circumstances that are not fully outside the Company’s control, for instance, the proportion of direct to indirect sales subject to rebates, administrative fees and others, the Company performs a sensitivity analysis. Holding all other assumptions constant, for a 140 BP change in the ratio of sales subject to rebates, administrative fees and others to indirect sales would increase the reserve for rebates, administrative fees and others by $0.0 million or decrease the same reserve by $0.1 million depending on the direction of the change in the ratio. Fundamentally, the BP change calculation is determined based on the six month trend of the average ratio of sales subject to rebates, administrative fees and others

to indirect sales. Due to the competitive generic pharmaceutical industry and our recent experience with wholesalers' strategy and shifts in contracted and non-contracted indirect sales, we believe the six month trend of the average ratio of sales subject to rebates, administrative fees and others to indirect sales provides a representative basis for sensitivity analysis.

Sales Returns: Certain of the Company's products are sold with the customer having the right to return the product within specified periods. Provisions are made at the time of sale based upon historical experience. Historical factors such as one-time recall events as well as pending new developments like comparable product approvals or significant pricing movement that may impact the expected level of returns are taken into account to determine the appropriate reserve estimate at each balance sheet date. As part of the evaluation of the reserve required, the Company considers actual returns to date that are in process, the expected impact of any product recalls and the amount of wholesaler's inventory to assess the magnitude of unconsumed product that may result in sales returns to the Company in the future. The sales returns level can be impacted by factors such as overall market demand and market competition and availability for substitute products which can increase or decrease the pull through for sales of the Company's products and ultimately impact the level of sales returns.

For the year ended December 31, 2018 the Company incurred a return provision of $20.2 million, or 1.1% of gross sales of $1,887.9 million, compared to $26.9 million, or 1.1% of gross sales of $2,351.1 million in the prior year. The dollar decrease in the comparative period was the result of gross sales decreases. The Company ensures that this rate as a percent of gross sales is reasonable through inspection of historical trends and evaluation of recent activity. Furthermore, other events that could materially alter return rates include: acquisitions and integration activities that consolidate dissimilar contract terms and could increase or decrease the return rate depending on the contracting power of the acquired business; and consumer demand shifts by products, which could either increase or decrease the return rate depending on the product or products specifically demanded and ultimately returned.

To better understand the impact of changes in return reserve based on certain circumstances, the Company performs a sensitivity analysis. Holding all other assumptions constant, for an average 0.7 months change in the lag from the time of sale to the time the product return is processed, this change would result in an increase of $1.0 million or a decrease of $0.9 million of the return reserve expense if the lag increases or decreases, respectively. The average 0.7 months change in the lag from the time of sale to the time the product return is processed was determined based on the difference between the high and low lag time for the past twelve month historical activities. This sensitivity analysis is a change from prior reported periods which was determined based on the average variances for the last six months of returns activity. The prior method did not give a measurable variance to calculate a sensitivity. Due to the change in the volume and type of products sold by the Company in the recent past, we have determined that the lag calculation provides a reasonable basis for sensitivity analysis.

Allowance for Coupons, Advertising, Promotions and Co-Pay Discount Cards: The Company issues coupons from time to time that are redeemable against certain of our Consumer Health products. In addition to couponing, from time to time the Company authorizes various retailers to run in-store promotional sales and co-pay discount of its products. At the point of sale, the Company records an estimate of the dollar value of coupons expected to be redeemed, the dollar amount owed back to the retailer and co-pay discount as variable consideration since the Company intends to continuously issue coupons, advertising promotion and co-pay discount from time to time. This coupon estimate is based on historical experience and is adjusted as needed based on actual redemptions. Upon receiving confirmation that an advertising promotion was run, the Company adjusts the estimate of the dollar amount expected to be owed back to the retailer as needed. This estimate is then adjusted to actual upon receipt of an invoice from the retailer. Additionally, the Company provides consumer co-pay discount cards, administered through outside agents to provide discounted products when redeemed. The Company records an estimate of the dollar value of co-pay discounts expected to be utilized based on historical experience and is adjusted as needed based on actual experience.

Doubtful Accounts: Provisions for doubtful accounts, which reflect trade receivable balances owed to the Company that are believed to be uncollectible, are recorded as a component of selling, general and administrative ("SG&A") expenses. In estimating the allowance for doubtful accounts, the Company considers its historical experience with collections and write-offs, the credit quality of its customers and any recent or anticipated changes thereto, and the outstanding balances and past due amounts from its customers. Note that in the ordinary course of business, and consistent with our peers, we may from time to time offer extended payment terms to our customers as an incentive for new product launches or in other circumstances in accordance with standard industry practices. These extended payment terms do not represent a significant risk to the collectability of accounts receivable as of the period-end. Accounts are considered past due when they remain uncollected beyond the due date specified in the applicable contract or on the applicable invoice, whichever is deemed to take precedence.

As of December 31, 2018, the Company had a total of $33.4 million of past due gross accounts receivable and $5.9 million aged over 60 days. The Company performs monthly a detailed analysis of the receivables due from its customers and provides

a specific reserve against known uncollectible items. The Company also includes in the allowance for doubtful accounts an amount that it estimates to be uncollectible for all other customers, based on a percentage of the past due receivables. The percentage reserved increases as the age of the receivables increases. Accounts are written off once all reasonable collection efforts have been exhausted and/or when facts or circumstances regarding the customer (i.e. bankruptcy filing) indicate that the chance of collection is remote.

Inventories: Inventories are stated at the lower of cost and net realizable value ("NRV") (see Note 4 — “Inventories”). The Company maintains an allowance for slow-moving and obsolete inventory as well as inventory where the cost is in excess of its NRV. For finished goods inventory, the Company estimates the amount of inventory that may not be sold prior to its expiration or is slow-moving based upon recent sales activity by unit and wholesaler inventory information. The Company also analyzes its raw material and component inventory for slow-moving items and NRV. For the years ended December 31, 2018, 2017 and 2016, the Company recorded a provision for inventory obsolescence and NRV of $27.3 million, $21.4 million, and $32.1 million, respectively. The allowances for inventory obsolescence were $46.5 million and $34.4 million as of December 31, 2018 and 2017, respectively.

The Company capitalizes inventory costs associated with its products prior to regulatory approval when, based on management judgment, future commercialization is considered probable and future economic benefit is expected to be realized. The Company assesses the regulatory approval process and where the product stands in relation to that approval process including any known constraints or impediments to approval. The Company also considers the shelf life of the product in relation to the product timeline for approval.

At December 31, 2018, the Company established a reserve of $4.0 million related to R&D raw materials that are not expected to be utilized prior to expiration while at the prior year end, the Company had approximately $1.5 million in reserves for R&D raw materials.

Property, Plant and Equipment: Property, plant and equipment is stated at cost, less accumulated depreciation. Depreciation is calculated using the straight-line method in amounts considered sufficient to amortize the cost of the assets to operations over their estimated useful lives or lease terms. Depreciation expense was $29.3 million, $23.7 million and $22.2 million for the years ended December 31, 2018, 2017 and 2016, respectively. The following table sets forth the average estimated useful lives at acquisition of the Company’s property, plant and equipment, by asset category:

Asset category	Depreciable Life (years)
Buildings	30 - 50
Building and leasehold improvements	10 - 20
Furniture and equipment	7 - 20
Automobiles	5 - 7
Computer hardware and software	3 - 5

Intangible Assets: Intangible assets consist primarily of goodwill, which is carried at its initial value, subject to impairment testing, In-Process Research and Development ("IPR&D"), which is accounted for as an indefinite-lived intangible asset, subject to impairment testing until completion or abandonment of the project, and product licensing costs, trademarks and other such costs, which are capitalized and amortized on a straight-line basis over their useful lives, normally ranging from one year to thirty years. The Company regularly assesses its amortizable intangible assets for impairment based on several factors, including estimated fair value and anticipated cash flows. If the Company incurs additional costs to renew or extend the life of an intangible asset, such costs are added to the remaining unamortized cost of the asset, if any, and the sum is amortized over the extended remaining life of the asset. Goodwill is tested for impairment annually or more frequently if changes in circumstances or the occurrence of events suggest that impairment may exist. The Company uses widely accepted valuation techniques to determine the fair

value of its reporting units used in its annual goodwill impairment analysis. The Company's valuation is primarily based on qualitative and quantitative assessments regarding the fair value of the reporting unit relative to its carrying value. The Company models the fair value of the reporting unit based on projected earnings and cash flows of the reporting unit. Impairments are recorded within the impairment of intangible assets line in the Consolidated Statements of Comprehensive Income.

Net (Loss) Income Per Common Share: Basic net (loss) income per common share is based upon weighted average common shares outstanding. Diluted net (loss) income per common share is based upon the weighted average number of

common shares outstanding, including the dilutive effect, if any, of stock options and convertible securities using the treasury stock and if converted methods. Anti-dilutive shares excluded from the computation of diluted net (loss) income per share for 2018, 2017 and 2016 include 3.7 million, 3.2 million and 3.6 million shares, respectively, related to options.

Income Taxes: Income taxes are accounted for under the asset and liability method. Deferred income tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities, and net operating loss and other tax credit carry-forwards. These items are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company records a valuation allowance to reduce the deferred income tax assets to the amount that is more likely than not to be realized. On December 22, 2017, the Tax Cuts and Jobs Act (the "Tax Act") was enacted into law and the new legislation contains several key tax provisions including a one-time mandatory transition tax on accumulated foreign earnings and a reduction of the corporate income tax rate to 21%, among others. We are required to recognize the effect of the tax law changes in the period of enactment, such as re-measuring our U.S. deferred tax assets and liabilities and reassessing the net realizability of our deferred tax assets and liabilities. The Company's foreign subsidiaries do not have accumulated earnings that can be distributed; therefore, the provisions of the Tax Act related to the repatriation of foreign earnings are not applicable to the Company at December 31, 2018. See Note 11 — Income Taxes for more information.

Fair Value of Financial Instruments: The Company applies ASC 820 - Fair Value Measurement, which establishes a framework for measuring fair value and clarifies the definition of fair value within that framework. ASC 820 - Fair Value Measurement defines fair value as an exit price, which is the price that would be received for an asset or paid to transfer a liability in the Company's principal or most advantageous market in an orderly transaction between market participants on the measurement date. The fair value hierarchy established in ASC 820 - Fair Value Measurement generally requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Observable inputs reflect the assumptions that market participants would use in pricing the asset or liability and are developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the entity's own assumptions based on market data and the entity's judgments about the assumptions that market participants would use in pricing the asset or liability, and are to be developed based on the best information available in the circumstances.

The valuation hierarchy is composed of three levels. The classification within the valuation hierarchy is based on the lowest level of input that is significant to the fair value measurement. The levels within the valuation hierarchy are described below:

- Level 1—Assets and liabilities with unadjusted, quoted prices listed on active market exchanges. Inputs to the fair value measurement are observable inputs, such as quoted prices in active markets for identical assets or liabilities. The carrying value of the Company's cash and cash equivalents are considered Level 1 assets.

- Level 2—Inputs to the fair value measurement are determined using prices for recently traded assets and liabilities with similar underlying terms, as well as directly or indirectly observable inputs, such as interest rates and yield curves that are observable at commonly quoted intervals. The Company has no Level 2 assets or liabilities in any of the periods presented.

- Level 3—Inputs to the fair value measurement are unobservable inputs, such as estimates, assumptions, and valuation techniques when little or no market data exists for the assets or liabilities. The portion of the fair valuation of the available-for-sale investment held in shares of Nicox stock that is subject to a lock-up provision is considered a Level 3 asset. The additional consideration payable as a result of prior years' acquisitions and other insignificant contingent amounts are considered Level 3 liabilities.

The following table summarizes the basis used to measure the fair values of the Company's financial instruments (in thousands):

Description	December 31, 2018	Fair Value Measurements at Reporting Date, Using: Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$224,868	$ 224,868	$ —	$ —
Nicox stock with lockup provisions	18	—	—	18
Total assets	$224,886	$ 224,868	$ —	$ 18

Description	December 31, 2017	Quoted Prices in Active Markets for Identical Items (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash and cash equivalents	$368,119	$368,119	$ —	$ —
Nicox stock with lockup provisions	35	—	—	35
Total assets	$368,154	$368,119	$ —	$ 35
Purchase consideration payable	3,901	—	—	3,901
Total liabilities	$3,901	$—	$ —	$ 3,901

In accordance with ASC 820 - Fair Value Measurement, the Company records unrealized holding gains and losses on available-for-sale securities in the “Accumulated other comprehensive income” caption in the Consolidated Balance Sheet. As of December 31, 2018, the Company maintained rights to receive a small number of shares of Nicox stock held in an expense escrow. The unrealized holding loss on these shares was a negligible dollar amount as of December 31, 2018. The escrow shares are not expected to be released within one year, and accordingly, the original cost basis of less than $0.1 million on these shares is included within other non-current assets on the Company’s Consolidated Balance Sheet as of December 31, 2018. The fair value of the investment is estimated using observable and unobservable inputs to discount for lack of marketability.

On May 31, 2017, the Company gained the right to receive additional Nicox stock fair valued at $3.0 million as a milestone payment. The Company received the additional shares of Nicox stock in early June 2017 and subsequently sold them later that month for net cash proceeds of $2.6 million. Both the $3.0 million milestone payment and the subsequent loss of $0.4 million on the sale of the Nicox shares were reported within other non-operating income (expense), net in the Company's Condensed Consolidated Statement of Comprehensive (Loss) Income for the year ended December 31, 2017.

Stock-Based Compensation: Stock-based compensation cost is estimated at grant date based on the fair value of the award, and the cost is recognized as expense ratably over the vesting period. The Company uses the Black-Scholes model for estimating the grant date fair value of stock options. Determining the assumptions to be used in the model is highly subjective and requires judgment. The Company uses an expected volatility that is based on the historical volatility of its common stock. The expected life assumption is based on historical employee exercise patterns and employee post-vesting termination behavior. The risk-free interest rate for the expected term of the option is based on the average market rate on U.S. Treasury securities of similar term in effect during the quarter in which the options were granted. The dividend yield reflects the Company’s historical experience as well as future expectations over the expected term of the option. The Company estimates forfeitures at the time of grant and revises the estimate in subsequent periods, as necessary, if actual forfeitures differ from initial estimates.

Note 3 — Accounts Receivable, Sales and Allowances

The nature of the Company's business inherently involves, in the ordinary course, significant amounts and substantial volumes of transactions and estimates relating to allowances for product returns, chargebacks, rebates, doubtful accounts and discounts given to customers. This is typical of the pharmaceutical industry and is not necessarily specific to the Company. Depending on the product, the end-user customer, the specific terms of national supply contracts and the particular arrangements with the Company's wholesaler customers, certain rebates, chargebacks and other credits are deducted from the Company's accounts receivable. The process of claiming these deductions depends on wholesalers reporting to the Company the amount of deductions that were earned under the terms of the respective agreement with the end-user customer (which in turn depends on the specific end-user customer, each having its own pricing arrangement that entitles it to a particular

deduction). This process can lead to partial payments to the Company against outstanding invoices as the wholesalers take the claimed deductions at the time of payment.

With the exception of the provision for doubtful accounts, which is reflected as part of selling, general and administrative expense, the provisions for the following customer reserves are reflected as a reduction of revenues in the accompanying consolidated statements of comprehensive (loss) income. Additionally, with the exception of administrative fees and others, which is included as a current liability, the ending reserve balances are included in trade accounts receivable, net in the Company's consolidated balance sheets.

Trade accounts receivable, net consists of the following (in thousands):

	December 31,	
	2018	2017
Gross accounts receivable (1)	$308,305	$378,759
Less reserves for:		
Chargebacks (2)	(55,312)	(73,984)
Rebates (2)	(55,963)	(111,945)
Product returns	(35,146)	(41,687)
Discounts and allowances	(6,561)	(7,779)
Advertising and promotions	(1,574)	(1,301)
Doubtful accounts	(623)	(680)
Trade accounts receivable, net	$153,126	$141,383

(1) The reduction in the Gross accounts receivable balance as of December 31, 2018 when compared to the December 31, 2017 balance is due to the decline in Gross sales in the fourth quarter of 2018 compared to the fourth quarter of 2017.

(2) The reductions in the reserve for chargebacks and in the reserve for rebates as of December 31, 2018 compared to December 31, 2017 is primarily due to payment timing, product mix, customer mix and lower wholesaler inventory. Additionally, a change in contractual terms with a major customer in the first quarter of 2018 resulted in an increase in chargebacks and a decrease in rebates, which is also a contributing factor in the comparability between the two periods compared.

For the years ended December 31, 2018, 2017 and 2016, the Company recorded the following adjustments to gross sales (in thousands):

	Year ended December 31,		
	2018	2017	2016
Gross sales	$1,887,862	$2,351,071	$2,891,267
Less adjustments for:			
Chargebacks (1)	(830,038)	(953,326)	(1,218,560)
Rebates, administrative fees and others (1)	(297,802)	(476,601)	(463,724)
Product returns	(20,162)	(26,874)	(28,285)
Discounts and allowances	(36,933)	(45,292)	(55,494)
Advertising, promotions, and others	(8,909)	(7,933)	(8,361)
Revenues, net	$694,018	$841,045	$1,116,843

(1) The decreases in chargebacks and rebates, administrative and other fees for the twelve month period ended December 31, 2018 compared to the same period in 2017, were primarily due to product mix, customer mix, volume

declines, and price erosion due to increased industry pricing pressure and the competitive nature of our business. Additionally, a change in contractual terms with a major customer in the first quarter of 2018 resulted in an increase in chargebacks and a decrease in rebates, which is also a contributing factor in the variances between the two periods compared.

The annual activity in the Company's allowance for customer deductions accounts for the three years ended December 31, 2018 is as follows (in thousands):

	Returns	Chargebacks	Rebates (1)	Discounts	Doubtful Accounts	Advertising & Promotions	Total
Balance at December 31, 2015	$48,333	$ 91,844	$162,596	$10,079	$ 1,579	$ 1,518	$315,949
Provision	28,285	1,218,560	384,074	55,494	—	8,361	1,694,774
Charges processed	(32,929)	(1,230,044)	(448,735)	(53,184)	(619)	(9,191)	(1,774,702)
Balance at December 31, 2016	$43,689	$ 80,360	$97,935	$12,389	$ 960	$ 688	$236,021
Provision	26,874	953,326	416,125	45,292	—	7,933	1,449,550
Charges processed	(28,876)	(959,702)	(402,115)	(49,902)	(280)	(7,320)	(1,448,195)
Balance at December 31, 2017	$41,687	$ 73,984	$111,945	$7,779	$ 680	$ 1,301	$237,376
Provision	20,162	830,038	257,417	36,933	—	8,909	1,153,459
Charges processed	(26,703)	(848,710)	(313,399)	(38,151)	(57)	(8,636)	(1,235,656)
Balance at December 31, 2018	$35,146	$ 55,312	$55,963	$6,561	$ 623	$ 1,574	$155,179

(1) As provisions for rebates, administrative fees and others represent both contra-receivables and current liabilities, depending on the method of settlement, the cumulative provision relating to rebates, administrative fees and others is bifurcated as applicable based on the associated consolidated balance sheet classification. Accordingly, for the years ended December 31, 2018, 2017 and 2016, an additional $40.4 million, $60.5 million and $79.7 million, respectively, of provision was associated with administrative fees and others.

Provisions and utilizations of provisions activity in the current period which relate to prior period revenues are not provided because to do so would be impracticable. Our current systems and processes do not capture the chargeback and rebate settlements by the period in which the original sales transaction was recorded. Chargeback and rebate claims are not submitted by customers with sufficient details to link the accrual recorded at the point of sale with the settlement of the accrual. As a result, the Company is unable to reasonably determine the dollar amount of the change in estimate in its gross to net reporting reflected in its results of operations for each period presented, and, those changes could be significant; however, the Company uses a combination of factors and applications to estimate the dollar amount of reserves for chargebacks and rebates at each balance sheet date. The Company regularly monitors the chargeback reserve based on an analysis of the Company's product sales and most recent claims, wholesaler inventory, current pricing, and anticipated future pricing changes. If claims are different from the estimate due to changes from estimated rates, accrual rate adjustments are considered prospectively when determining provisions in accordance with authoritative GAAP.

Note 4 — Inventories, Net

The components of inventories, net of allowances, are as follows (in thousands):

	December 31,	
	2018	2017
Finished goods	$76,981	$79,226
Work in process	13,870	15,447
Raw materials and supplies	82,794	88,895
	$173,645	$183,568

The Company maintains an allowance for excess and obsolete inventory, as well as inventory where its cost is in excess of its net realizable value. The activity in the allowance for excess, obsolete, and net realizable value inventory

account for the two years ended December 31, 2018 and 2017, was as follows (in thousands):

	Years Ended December 31,	
	2018	2017
Balance at beginning of year	$34,402	$33,532
Provision	27,341	21,369
Charges processed	(15,238)	(20,499)
Balance at end of year	$46,505	$34,402

Note 5 - Goodwill and Other Intangible Assets

Intangible assets consist primarily of Goodwill, which is carried at its initial value, subject to evaluation for impairment, In-Process Research and Development ("IPR&D"), which is accounted for as an indefinite-lived intangible asset, subject to impairment testing until completion or abandonment of the project, and product licensing costs, trademarks and other such costs, which are capitalized and amortized on a straight-line basis over their useful lives, normally ranging from one to thirty years. Accumulated amortization of intangible assets was $217.6 million and $219.0 million at December 31, 2018 and 2017, respectively. Amortization expense was $53.5 million, $61.4 million and $65.7 million for the years ended December 31, 2018, 2017 and 2016, respectively. The Company regularly assesses its amortizable intangible assets for impairment based on several factors, including estimated fair value and anticipated cash flows.

IPR&D intangible assets represent the value assigned to acquired R&D projects that principally represent rights to develop and sell a product that the Company has acquired which have not yet been completed or approved. These assets are subject to impairment testing until completion or abandonment of each project. Impairment testing requires the development of significant estimates and assumptions involving the determination of estimated net cash flows for each year for each project or product (including net revenue, cost of sales, selling and marketing costs and other costs which may be allocated), the appropriate discount rate to select in order to measure the risk inherent in each future cash flow stream, the assessment of each asset's life cycle, the potential regulatory and commercial success risks, and competitive trends impacting the asset and each cash flow stream as well as other factors. The major risks and uncertainties associated with the timely and successful completion of the IPR&D projects include legal risk, market risk and regulatory risk. If applicable, upon abandonment of the IPR&D product, the assets are impaired.

During 2018, 18 IPR&D projects were impaired primarily due to anticipated market conditions and competition upon launch, reducing the viability for future development and resulting in impairment expenses of $139.5 million. In 2017 and 2016, three and one IPR&D projects were impaired resulting in impairment expenses $24.6 million and $3.9 million, respectively. Additionally, during 2018, 25 product licensing rights and other intangibles were impaired due to market conditions and increase in manufacturing costs resulting in impairment expenses of $91.6 million; compared to impairments expenses of $103.5 million on 10 product licensing rights in 2017, and $40.5 million on eight product licensing rights in 2016.

If the Company incurs additional costs to renew or extend the life of an intangible asset, such costs are added to the remaining unamortized cost of the asset, if any, and the sum is amortized over the extended remaining life of the asset.

Goodwill is tested for impairment annually or more frequently if changes in circumstances or the occurrence of events suggest that impairment may exist. The Company uses widely accepted valuation techniques to determine the fair value of its reporting units used in its annual goodwill impairment analysis. The Company's valuation is primarily based on qualitative and quantitative assessments regarding the fair value of the reporting unit relative to its carrying value. The Company also models the fair value of the reporting unit based on projected earnings and cash flows of the reporting unit. The Company performed its annual impairment test on October 1, 2018 and determined that the fair value of its reporting units are in excess of its carrying value and, therefore, no goodwill impairment charge was

necessary. As a result of the impacts of the termination of the Merger Agreement and the Delaware Opinion, as well as the Term loans downgrade, the Company performed additional impairment testing as of December 31, 2018 and determined that the fair value of its reporting units are in excess of its carrying value and, therefore, no goodwill impairment charge was necessary.

Changes in goodwill during the two years ended December 31, 2018 were as follows (in thousands):

	Goodwill
December 31, 2016	$284,293
Foreign currency translation	1,017
December 31, 2017	$285,310
Foreign currency translation	(1,431)
December 31, 2018	$283,879

The following table sets forth the major categories of the Company's intangible assets and the weighted-average remaining amortization period as of December 31, 2018 for those assets that are not already fully amortized (in thousands):

	Gross Carrying Amount (2)	Accumulated Amortization	Reclassifications	Impairment (1)	Net Carrying Amount	Weighted Average Remaining Amortization Period (years)
Product licensing rights	$597,960	$(203,323)	$ 5,300	$(131,306)	$268,631	9.2
IPR&D	149,161	—	(5,300)	(139,461)	4,400	N/A - Indefinite lived
Trademarks	16,000	(6,304)	—	—	9,696	17.5
Customer relationships	4,225	(2,318)	—	—	1,907	7.3
Other intangibles	11,235	(5,658)	—	(5,235)	342	0.3
	$778,581	$(217,603)	$ —	$(276,002)	$284,976	

(1) Impairment of product licensing rights and other intangibles is stated at gross carrying cost of $131.3 million and $5.2 million less accumulated amortization of $42.8 million and $2.1 million as of the impairment dates. Accordingly, the total net impairment expense was $91.6 million, of which $88.5 million and $3.1 million, were recognized in product licensing rights and other intangibles respectively, for the year ended December 31, 2018.

(2) Differences in the Gross Amounts between periods are due to the write down of fully amortized assets.

Changes in intangible assets during the two years ended December 31, 2018 and 2017, were as follows (in thousands):

	Product licensing rights	IPR&D	Trademarks	Customer relationships	Other intangibles
December 31, 2016	$564,005	$173,757	$ 11,756	$ 2,427	$ 6,909
Acquisitions	200	—	—	—	—
Amortization	(58,335)	—	(1,132)	(260)	(1,717)
Impairments	(103,530)	(24,596)	—	—	—
December 31, 2017	$402,340	$149,161	$ 10,624	$ 2,167	$ 5,192
Acquisitions	50	—	—	—	—
Amortization	(50,567)	—	(928)	(260)	(1,717)
Impairments	(88,492)	(139,461)	—	—	(3,133)
Reclassifications	5,300	(5,300)	—	—	—
December 31, 2018	$268,631	$4,400	$ 9,696	$ 1,907	$ 342

The amortization expense of acquired intangible assets for each of the following periods are expected to be as follows (in thousands):

Year ending December 31,	Amortization Expense
2019	$ 40,404
2020	31,594
2021	31,594
2022	31,594
2023 and thereafter	145,390
Total	$ 280,576

Note 6 – Property, Plant and Equipment

Property, plant and equipment consist of the following (in thousands):

	December 31,	
	2018	2017
Land	$17,608	$17,846
Buildings and leasehold improvements	138,126	106,316
Furniture and equipment	240,080	202,897
	395,814	327,059
Accumulated depreciation	(158,824)	(130,814)
	236,990	196,245
Construction in progress	97,863	117,173
Property, plant and equipment, net	$334,853	$313,418

At December 31, 2018 and 2017, property, plant and equipment carrying a net book value of $91.9 million and $82.8 million, respectively, was located outside the United States.

The 2018 increase in Property, Plant and Equipment is due primarily to spending for compliance with Drug Supply Chain Security Act ("DSCSA") requirements and expansion and modernization initiatives at our Decatur and Somerset manufacturing plants.

At December 31, 2018, the Company had $97.9 million of assets under construction which consisted primarily of investment in building expansions, equipment, and compliance with DSCSA. Depreciation will begin on these assets once they are placed into service. The Company assesses its long-lived assets, consisting primarily of property and equipment, for impairment when material events and changes in circumstances indicate that the carrying value may not be recoverable. For the year ended December 31, 2018, the Company recorded impairment losses of $6.1 million. No impairment losses were recorded in 2017. During 2018, the Company capitalized interest into PP&E in the amount of $6.3 million.

Depreciation expense was $29.3 million, $23.7 million and $22.2 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Note 7 — Financing Arrangements

Term Loans

During 2014, in order to finance its acquisitions of Hi-Tech Pharmacal Co Inc. and VersaPharm Inc., the Company entered into two term loan agreements (the “Term Loans”, or collectively, the “Existing Term Loan Facility”) with certain lenders and with JPMorgan Chase Bank, N.A., as administrative agent. On February 16, 2016, the Company made a voluntary prepayment of its Existing Term Loan Facility of $200.0 million which settled all future required quarterly principal repayments of the Term

Loan Agreements as denoted above until the date of maturity of the Term Loan Agreements or April 16, 2021, although future voluntary principal repayments are permitted.

The aggregate principal amount financed was $1,045.0 million. As of December 31, 2018, outstanding debt under the Term Loans was $831.9 million and the Company was in compliance with all applicable covenants which included customary limitations on indebtedness, distributions, liens, acquisitions, investments, and other activities. As of December 31, 2018, the Term Loan has a market price of $821 per $1,000 of principal amount. The Existing Term Loan Facility is scheduled to mature in April 16, 2021.

During the year ended December 31, 2018, the Company amortized $5.0 million of the total Term Loans-related costs, resulting in $11.5 million remaining balance of deferred financing costs at December 31, 2018. During the years ended December 31, 2017 and 2016, the Company amortized $5.0 million and $10.4 million, respectively, of Term Loans-related costs. The decrease in amortization of deferred financing fees in 2018 and 2017 as compared to 2016 was primarily the result of the deferred financing fee amortization associated with the voluntary principal repayment in 2016. The Company will amortize this balance using the straight-line method over the life of the Term Loan Agreements.

As of the date of the filing of this Form 10-K until the maturity of the Term Loans, our spread will be based upon the Ratings Level applicable on such date as documented below. As of the period ended December 31, 2018, the Company was a Ratings Level III for the Existing Term Loan Facility.

Ratings Level	Index Ratings (Moody’s/S&P)	Adjusted LIBOR (Eurodollar) Spread	Adjusted prime/federal funds rate (ABR) Spread
Level I	B1/B+ or higher	4.25%	3.25%
Level II	B2/B	4.75%	3.75%
Level III	B3/B- or lower	5.50%	4.50%

For the years ended December 31, 2018, 2017 and 2016, the Company recorded interest expense of $56.9 million, $45.5 million and $43.5 million, respectively in relation to the Term Loans. The increase in interest expense was in part due to a downgrading of the Company's Term loan credit rating.

JPMorgan Credit Facility

On April 17, 2014, the Akorn Loan Parties entered into a Credit Agreement (the “JPM Credit Agreement”) with JPMorgan as administrative agent, and Bank of America, N.A., as syndication agent for certain other lenders (at closing, Bank of America, N.A. and Wells Fargo Bank, N. A.) for a $150.0 million revolving credit facility (the “JPM Revolving Facility”).

The Company may use any proceeds from borrowings under the JPM Revolving Facility for working capital needs and for the general corporate purposes of the Company and its subsidiaries. At December 31, 2018, there were no outstanding borrowings under the JPM Revolving Facility, and availability was $135.0 million.

The JPM Credit Agreement places customary limitations on indebtedness, distributions, liens, acquisitions, investments, and other activities of the Akorn Loan Parties in a manner designed to protect the collateral while providing flexibility for growth and the historic business activities of the Company and its subsidiaries. The JPM Credit Agreement is set to mature in April of 2019.

Subject to other conditions in the JPM Credit Agreement, advances under the JPM Revolving Facility will be made in accordance with a borrowing base consisting of the sum of the following:

(a) 85% of eligible accounts receivable;
(b) The lesser of:
a. 65% of the lower of cost or market value of eligible raw materials and work in process inventory, valued on a first in first out basis, and
b. 85% of the orderly liquidation value of eligible raw materials and work in process inventory, valued on a first in first out basis;
(c) The lesser of:
a. 75% of the lower of cost or market value of eligible finished goods inventory, valued on a first in first out basis, and

b. 85% of the orderly liquidation value of eligible finished goods inventory, valued on a first in first out basis up to 85% of the liquidation value of eligible inventory (or 75% of market value finished goods inventory); and

(d) Less any reserves deemed necessary by the administrative agent, and allowed in its permitted discretion.

The total amount available under the JPM Revolving Facility includes a $10.0 million letter of credit facility.

Under the terms of the JPM Credit Agreement, if availability under the JPM Revolving Facility falls below 12.5% of commitments or $15.0 million for more than 30 consecutive days, the Company may be subject to cash dominion, additional reporting requirements, and additional covenants and restrictions. The Company may seek additional commitments to increase the maximum amount of the JPM Revolving Facility to $200.0 million.

Unless cash dominion is exercised by the lenders in connection with the JPM Revolving Facility, the Company will be required to repay the JPM Revolving Facility upon its expiration five years from issuance, subject to permitted extension, and will pay interest on the outstanding balance monthly based, at the Company's election, on an adjusted prime/federal funds rate ("ABR") or an adjusted LIBOR ("Eurodollar"), plus a margin determined in accordance with the Company's consolidated fixed charge coverage ratio (EBITDA to fixed charges) as follows:

Fixed Charge Coverage Ratio	Revolver ABR Spread	Revolver Eurodollar Spread
Category 1 > 1.50 to 1.0	0.50%	1.50%
Category 2 > 1.25 to 1.00 but < 1.50 to 1.00	0.75%	1.75%
Category 3 < 1.25 to 1.00	1.00%	2.00%

In addition to interest on borrowings, the Company will pay an unused line fee of 0.25% per annum on the unused portion of the JPM Revolving Facility.

During an event of default, as defined in the JPM Credit Agreement, any interest rate will be increased by 2.0% per annum.

The JPM Revolving Facility is secured by all of the assets of Akorn Loan Parties, including springing control of the Company's primary deposit account pursuant to a deposit account control agreement. The financial covenants require Akorn Loan Parties to maintain the following on a consolidated basis:

(a) Minimum Liquidity, as defined in the JPM Credit Agreement, of not less than (a) $120.0 million plus (b) 25% of the JPM Revolving Facility commitments during the three-month period preceding the June 1, 2016 maturity date of the Company's senior convertible notes.

(b) Ratio of EBITDA to fixed charges of no less than 1.00 to 1.00 (measured quarterly for the trailing 4 quarters).

As of December 31, 2018, the Company was in compliance with all covenants applicable to the JPM Revolving Facility.

The Company may use any proceeds from borrowings under the JPM Revolving Facility for working capital needs and for the general corporate purposes of the Company and its subsidiaries. At December 31, 2018, there were no

outstanding borrowings and no outstanding letter of credit under the JPM Revolving Facility.

The JPM Credit Agreement places customary limitations on indebtedness, distributions, liens, acquisitions, investments, and other activities of Akorn Loan Parties in a manner designed to protect the collateral while providing flexibility for growth and the historic business activities of the Company and its subsidiaries.

Convertible Notes

On June 1, 2011, the Company issued $120.0 million aggregate principal amount of 3.50% Convertible Senior Notes due June 1, 2016 (the “Notes”) which included $20.0 million in aggregate principal amount of the Notes issued in connection with

the full exercise by the initial purchasers of their over-allotment option. The Notes were governed by the Company's indenture with Wells Fargo Bank, National Association, as trustee (the "Indenture"). The Notes were offered and sold only to qualified institutional buyers. The net proceeds from the sale of the Notes were approximately $115.3 million, after deducting underwriting fees and other related expenses.

The Notes paid interest at an annual rate of 3.50% semiannually in arrears on June 1 and December 1 of each year, with the first interest payment completed on December 1, 2011. The Notes were convertible into the Company's common stock, cash or a combination thereof at an initial conversion price of $8.76 per share, which is equivalent to an initial conversion rate of approximately 114.1553 shares per $1,000 principal amount of the Notes, subject to adjustment for certain events described in the Indenture.

The Notes became convertible effective April 1, 2012 as a result of the Company's common stock closing above the required price of $11.39 per share for 20 of the last 30 consecutive trading days in the quarter ended March 31, 2012. The Notes remained convertible for each successive quarter, up to and including the maturity date of June 1, 2016, as a result of meeting the trading price requirement at the end of each prior quarter. During the year ended December 31, 2015, $44.3 million in principal amount of Notes were converted at the holders' request which resulted in recognition of losses of $1.2 million, due to the conversions. On June 1, 2016, the remaining $43.2 million of Notes was converted at the holder's request, resulting in complete conversion of the Notes.

As a result of the complete conversion on June 1, 2016, during the year ended 2016, the Company recorded the following expenses in relation to the Notes (in thousands):

	2016
Interest expense at 3.50% coupon rate (1)	$ 687
Debt discount amortization	750
Deferred financing cost amortization	136
	$ 1,573

(1) As a result of the restatement of the 2014 financial data and the resultant delays in filings of the 2015 financial statements, the Company was required to remit an additional 0.5% interest penalty to all holders of the convertible notes from January 1, 2016 to April 5, 2016 and a lump sum payment equal to 0.25% of the principal balance held by consenting holders of the convertible notes as of April 6, 2016.

Aggregate cumulative maturities of long-term obligations (including the Term Loans and the JPM Revolving Facility) as of December 31, 2018 are:

(In thousands)	2019	2020	2021	Thereafter
Maturities	$ —	$ —	$831,938	$ —

Note 8 — (Loss) Earnings per Common Share

Basic net (loss) income per common share is based upon the weighted average number of common shares outstanding during the period. Diluted net (loss) income per common share is based upon the weighted average number of common shares outstanding, including the dilutive effect, if any, of potentially dilutive securities using the treasury stock method. Additionally, for the twelve month period ended December 31, 2016, the earnings per share amount was calculated using the if-converted method to account for the dilutive impact of the Convertible Notes. The

Convertible Notes matured in the quarter ended June 30, 2016.

The Company’s potentially dilutive shares consist of: (i) vested and unvested stock options that are in-the-money, (ii) unvested RSUs, and (iii) shares potentially issuable upon conversion of the Notes.

A reconciliation of the (loss) earnings per share data from a basic to a fully diluted basis is detailed below (amounts in thousands, except per share data):

	2018	2017	2016
(Loss) income from operations used for basic earnings per share	$(401,909)	$(24,550)	$184,243
Convertible debt income adjustments, net of tax	—	—	1,049
(Loss) income from operations adjusted for convertible debt as used for diluted earnings per share	$(401,909)	$(24,550)	$185,292
(Loss) income from operations per share:			
Basic	$(3.21)	$(0.20)	$1.50
Diluted (1)	$(3.21)	$(0.20)	$1.47
Shares used in computing (loss) income per share:			
Weighted average basic shares outstanding	125,383	124,790	122,869
Dilutive securities:			
Stock options and unvested RSUs	—	—	914
Shares issuable on conversion of the Notes	—	—	2,018
Total dilutive securities	—	—	2,932
Weighted average diluted shares outstanding	125,383	124,790	125,801

(1) As a result of the Company's expectation that it would likely settle all future note conversions in shares of the Company's common stock, the diluted income from operations per share calculation for the periods prior to the complete conversion of the convertible debt on June 1, 2016, included the dilutive effect of convertible debt and was offset by the exclusion of interest expense and deferred financing fees related to the convertible debt of $1.0 million, after-tax for the year ended December 31, 2016.

Note 9 — Leasing Arrangements

The Company leases real and personal property in the normal course of business under various operating leases and other insignificant capital leases, including non-cancelable and month-to-month agreements. Rental expense under these leases was $6.5 million, $5.9 million and $5.2 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Landlord incentives are recorded as deferred rent and amortized on a straight-line basis over the lease term. Rent escalations are recorded on a straight-line basis over the lease term. The following is a schedule, by year, of future minimum rental payments required under non-cancelable operating leases in place as of December 31, 2018 (in thousands):

Year ending December 31,	
2019	$4,564
2020	4,647
2021	4,283
2022	3,724
2023	2,673
2024 and thereafter	6,976
Total	$26,867

Note 10 — Stock Options, Restricted Stock and Employee Stock Purchase Plan

Stock Option Plan

The Company maintains equity compensation plans that allow the Company’s Board of Directors to grant stock options and other equity awards to eligible employees, officers, directors and consultants. On April 27, 2017, the

Company’s shareholders voted to approve the Akorn, Inc. 2017 Omnibus Incentive Compensation Plan (the “Omnibus Plan”). Under the Omnibus Plan, 8.0 million shares of the Company’s common stock were made available for issuance pursuant to equity awards. The Omnibus Plan replaced the Akorn, Inc. 2014 Stock Option Plan (the "2014 Plan"), which was approved by shareholders at the Company's 2014 Annual Meeting of Shareholders on May 2, 2014 and subsequently amended by proxy vote of the Company’s shareholders on December 16, 2016. The 2014 Plan had reserved 7.5 million shares for issuance upon the grant of stock options, restricted stock units (“RSUs”), or various other instruments to directors, officers, employees and

consultants. Following shareholder approval of the Omnibus Plan, no new awards could be granted under the 2014 Plan, although previously granted awards remain outstanding pursuant to their original terms. As of December 31, 2018, there were approximately 3.4 million stock options and 0.1 million RSU shares outstanding under the 2014 Plan. The 2014 Plan had replaced the Amended and Restated Akorn, Inc. 2003 Stock Option Plan (the "2003 Plan"), which expired on November 6, 2013. As of December 31, 2018, no awards remain outstanding under the 2003 Plan.

Under the Omnibus Plan, 2.0 million RSUs have been granted to employees and directors, of which 0.3 million have vested and 0.2 million have been forfeited, leaving 1.5 million RSUs outstanding as of December 31, 2018. No stock options were granted under the Omnibus Plan from inception through December 31, 2018. As of December 31, 2018, approximately 6.2 million shares remain available for future award grants under the Omnibus Plan.

The Company accounts for stock-based compensation in accordance with ASC Topic 718 - Compensation — Stock Compensation. Accordingly, stock-based compensation cost is estimated at the grant date based on the fair value of the award, and the cost is recognized as expense ratably over the vesting period. The Company uses the Black-Scholes model for estimating the grant date fair value of stock options. Determining the assumptions that enter into the model is highly subjective and requires judgment. The Company uses an expected volatility that is based on the historical volatility of its stock. The expected life assumption is based on historical employee exercise patterns and employee post-vesting termination behavior. The risk-free interest rate for the expected term of the option is based on the average market rate on U.S. Treasury securities in effect during the quarter in which the options were granted. The dividend yield reflects historical experience as well as future expectations over the expected term of the option. The Company estimates forfeitures at the time of grant and revises in subsequent periods, as necessary, if actual forfeitures differ from those estimates.

The Company recorded stock-based compensation expense of approximately $21.5 million, $21.0 million and $15.4 million during the years ended December 31, 2018, 2017 and 2016, respectively. The Company uses the single-award method for allocating compensation cost to each period.

As of December 31, 2018, the Company agreed to the modification of various stock-based awards of its former Chief Executive Officer and Chief Operating Officer to accelerate vesting to March 31, 2019 and December 31, 2018, respectively. The Company recognized stock-based compensation expense of $2.1 million in the year ended December 31, 2018 related to the accelerated vesting of these awards.

Stock Option Awards

From time to time, the Company has granted stock option awards to certain employees, executives and directors. No stock options were granted in 2018. The assumptions used in estimating the fair value of the stock options granted during the period, along with the weighted-average grant date fair values, were as follows:

	2017			2016		
Expected volatility	50%	—	50%	46%	—	50%
Expected life (in years)	4.8			4.7		
Risk-free interest rate	1.7%	—	1.7%	0.9%	—	1.8%
Dividend yield	—			—		
Weighted-average grant date fair value per stock option	$9.25			$11.13		

The table below sets forth a summary of stock option activity within the Company's stock-based compensation plans for the years ended December 31, 2018, 2017 and 2016:

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	Number of Shares (in thousands)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands) (1)
Outstanding at December 31, 2015	4,762	$ 20.33		
Granted	2,089	26.61		
Exercised	(1,794)	7.78		
Forfeited or expired	(291)	28.96		
Outstanding at December 31, 2016	4,766	$ 27.27		
Granted	66	21.28		
Exercised	(623)	15.53		
Forfeited or expired	(156)	28.20		
Outstanding at December 31, 2017	4,053	$ 28.95		
Granted	—	—		
Exercised	(22)	24.99		
Forfeited or expired	(613)	31.28		
Outstanding at December 31, 2018	3,418	$ 28.55	3.69	$ —
Exercisable at December 31, 2018	2,350	$ 29.00	3.41	$ —

(1) Includes only those options that were in-the-money as of December 31, 2018. Fluctuations in the intrinsic value of both outstanding and exercisable options may result from changes in underlying stock price and the timing and volume of option grants, exercises and forfeitures.

The aggregate intrinsic value for stock options outstanding and exercisable is defined as the difference between the market value of the Company’s common stock at the end of the period and the exercise price of stock options. The total intrinsic value of stock options exercised during the years ended December 31, 2018, 2017 and 2016 was approximately $0.2 million, $9.8 million and $40.3 million, respectively. As a result of the stock options exercised, the Company received cash and recorded additional paid-in-capital of approximately $0.5 million, $9.7 million and $14.0 million during the years ended December 31, 2018, 2017 and 2016, respectively.

As of December 31, 2018, the total amount of unrecognized compensation cost related to non-vested stock options was approximately $7.0 million, which is expected to be recognized as expense over a weighted-average period of 1.3 years.

Restricted Stock Unit Awards

From time to time, the Company has granted RSUs to certain employees, executives and directors. The majority of the grants to employees, executives and directors are pursuant to the Company's Long-Term Incentive Plans (the "LTIPs"), which call for annual grants of RSUs to all eligible employees and executives. The RSU awards vest 25% per year on each of the first four anniversaries of the grant date. All RSUs are valued at the closing market price of the Company’s common stock on the day of grant and the total value of the units is recognized as expense ratably over the vesting period of the grant. During the years ended December 31, 2018, 2017 and 2016 the Company granted 1.7 million, 0.7 million and 0.3 million RSUs to certain employees, executives and directors.

Set forth below is a summary of unvested RSU activity for the three years ended December 31, 2018:

	Number of Shares (in thousands)	Weighted Average Per Share Grant Date Fair Value
Unvested at December 31, 2015	253	$ 35.31
Granted	303	29.50
Vested	(118)	34.95
Forfeited	(22)	28.85
Unvested at December 31, 2016	416	$ 31.52
Granted	666	33.10
Vested	(137)	32.55
Forfeited	(57)	31.34
Unvested at December 31, 2017	888	$ 32.55
Granted (1)	1,711	16.07
Vested	(408)	30.22
Forfeited (1)	(548)	24.00
Unvested at December 31, 2018	1,643	$ 19.85

(1) RSUs granted and forfeited include 0.4 million RSUs held by the Company's former CEO and COO that were modified to accelerate vesting. This modification was treated as forfeiture of the old awards and granting of new awards with modified vesting terms.

As of December 31, 2018, the total amount of unrecognized compensation cost related to RSU awards was approximately $25.4 million which is expected to be recognized as expense over a weighted-average period of 2.9 years.

Employee Stock Purchase Plan

The 2016 Akorn, Inc. Employee Stock Purchase Plan (the "ESPP") permits eligible employees to acquire shares of the Company's common stock through payroll deductions. The ESPP has been structured to qualify under Section 423 of the Internal Revenue Code ("IRC"). Employees who elect to participate in the ESPP may withhold from 1% to 15% of eligible wages toward the purchase of stock. Shares will be purchased at a 15% discount off the lesser of the market price at the beginning or the ending of the applicable offering period. The ESPP is designed with two offering periods each year, one running from January 1st to December 31st and the other running from July 1st to December 31st. In a given year, employees may enroll in only one offering period, not both. Per IRC rules, annual purchases per employee are limited to $25,000 worth of stock, valued as of the beginning of the offering period. Accordingly, with the 15% discount, employees may withhold no more than $21,250 per year toward the purchase of stock under the ESPP. Employees are further limited to purchasing no more than 15,000 shares of stock per year. A total of 2.0 million shares of the Company's stock have been set aside for issuance under the ESPP. The ESPP was approved by vote of the Company's shareholders on December 16, 2016.

The initial offering period under the ESPP began in January 2017 and ran through the end of the year. The Company did not have an ESPP offering period starting on July 1, 2017 and did not have any offering periods in 2018 pursuant to terms of the Merger Agreement. During the year ended December 31, 2017, participants contributed approximately $2.8 million through payroll deductions toward the purchase of shares under the ESPP. The Company recorded stock-based compensation expense of $1.1 million during the year ended December 31, 2017 related to the ESPP.

A total of 2.0 million shares of stock were set aside for issuance under the ESPP. Participants in the 2017 offering period acquired a total of 0.1 million shares, leaving 1.9 million shares remaining available for future issuance as of December 31, 2018.

Note 11 — Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act (the "Tax Act") was enacted and implements comprehensive tax legislation which, among other changes, reduces the federal statutory corporate tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously deferred, creates new provisions related to foreign sourced earnings, eliminates the domestic manufacturing deduction and moves to a territorial system. Additionally, in December 2017, the Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which addresses how a company recognizes provisional amounts when a company does not have the necessary information available, prepared or analyzed (including computations) in reasonable detail to complete its accounting for the

effect of the changes in the Tax Act. The Company has completed the accounting for all of the enactment-date income tax effects of the Act within the prescribed measurement period, as defined in SAB 118, which ended on December 22, 2018.

Based on the provisions of the Tax Act, the Company re-measured its U.S. deferred tax assets and liabilities and adjusted its deferred tax balances to reflect the lower U.S. corporate income tax rate at December 31, 2017. The Company recorded the impact of the rate change on the return to provision differences that resulted in an income tax benefit of $3.0 million which is included as a discrete item in the 2018 income tax benefit. The Company's foreign subsidiaries do not have accumulated earnings that can be distributed; therefore, the provisions of the Act related to the repatriation of foreign earnings are not applicable to the Company at December 31, 2018.

The income tax (benefit) provision consisted of the following (in thousands):

	Current	Deferred	Total
Year ended December 31, 2018			
Federal	$2,768	$(40,345)	$(37,577)
State	(1,677)	(2,093)	(3,770)
Foreign	32	5,042	5,074
	$1,123	$(37,396)	$(36,273)
Year ended December 31, 2017			
Federal	$78,806	$(105,006)	$(26,200)
State	1,706	(9,785)	(8,079)
Foreign	89	(458)	(369)
	$80,601	$(115,249)	$(34,648)
Year ended December 31, 2016			
Federal	$107,818	$(26,377)	$81,441
State	11,247	(4,325)	6,922
Foreign	—	(1,306)	(1,306)
	$119,065	$(32,008)	$87,057

The income tax provision differs from the "expected" tax expense computed by applying the U.S. Federal corporate income tax rates of 21% to income before income taxes, as follows (in thousands):

	Years Ended December 31,		
	2018	2017	2016
Computed “expected” tax provision	$(92,018)	$(20,719)	$94,955
Change in income taxes resulting from:			
State income taxes, net of Federal income tax	(11,667)	(537)	4,501
Change in state income tax rate, net of Federal income tax	(16)	(4,714)	—
Foreign income tax (benefit) provision	(1,658)	2,206	1,580
Deduction for domestic production activities	—	(2,527)	(7,280)
Stock compensation	2,480	(1,316)	(11,395)
R&D tax credits	(750)	(1,200)	(825)
Nondeductible acquisition fees	(1,165)	1,974	39
Interest and penalties from Federal audit	7,935	15,650	—
Federal rate change	(3,027)	(26,902)	—
Discrete adjustments to prior year	570	1,561	—
162(m) Officers Compensation Limitation	1,483	—	—
Other expense, net	934	1,201	2,564
Valuation allowance change	60,626	675	2,918
Income tax (benefit) provision	$(36,273)	$(34,648)	$87,057

The geographic allocation of the Company’s income before income taxes between U.S. and foreign operations was as follows (in thousands):

	2018	2017	2016
Pre-tax (loss) income from U.S. operations	$(428,299)	$(49,572)	$287,880
Pre-tax loss from foreign operations	(9,883)	(9,626)	(16,580)
Total pre-tax (loss) income	$(438,182)	$(59,198)	$271,300

Net deferred income taxes at December 31, 2018 and 2017 include (in thousands):

	December 31,	
	2018	2017
Deferred tax assets:		
Net operating loss carry-forward	$48,766	$25,100
Stock-based compensation	9,071	7,668
Chargeback reserves	14,173	17,802
Reserve for product returns	8,012	9,479
Inventory valuation reserve	9,688	10,207
Long-term debt	2,226	3,084
Interest greater than 30% of EBITDA	13,930	—
Other	16,444	10,806
Total deferred tax assets	$122,310	$84,146
Valuation allowance	(71,157)	(10,531)
Net deferred tax assets	$51,153	$73,615
Deferred tax liabilities:		
Prepaid expenses	$(2,137)	$(1,709)
Depreciation & amortization – tax over book	(49,547)	(108,788)
Other	$(35)	$—
Total deferred tax liabilities	$(51,719)	$(110,497)
Net deferred income tax (liability)	$(566)	$(36,882)

The Company records a valuation allowance to reduce net deferred income tax assets to the amount that is more likely than not to be realized. In performing its analysis of whether a valuation allowance to reduce the deferred income tax asset was necessary, the Company evaluated the data and believes that it is not more likely than not that the deferred tax assets in the US, India, and Switzerland will be realized. Accordingly, the company has recorded a full valuation allowance against US, India, and Switzerland deferred tax assets. The Company established a valuation allowance of $71.2 million, $10.5 million and $9.9 million against its deferred tax assets as of December 31, 2018, 2017 and 2016, respectively.

The deferred tax balances have been reflected gross on the balance sheet and are netted only if they are in the same jurisdiction.

The Company's net operating loss ("NOL") carry-forwards as of December 31, 2018 consist of four component pieces: (i) U.S. Federal NOL carry-forwards valued at $22.2 million, (ii) State NOL carry-forwards valued at $2.7 million (iii) foreign (Indian) NOLs of $23.7 million and (iv) foreign (Swiss) NOLs of $0.7 million. The U.S. Federal NOL carry-forwards were obtained through the Merck Acquisition completed in the fourth quarter of 2013 in addition to the current year loss generated. State NOL carry-forwards are primarily from the loss generated in current year. The Company has established a full valuation allowance against U.S. Federal and State NOL carry-forwards due to uncertainty related to future earnings projections. The Indian NOL carry-forwards of $23.7 million relate to operating losses by the Company's subsidiary in India, which was acquired in 2012. The Company has established a valuation allowance against this entire amount. A portion of the Swiss NOL was obtained through the Akorn AG acquisition completed in the first quarter of 2015. It has also generated a loss in the current year. The NOL carry-forwards begin to expire in 2023 and, accordingly, the Company has established a valuation allowance against the entire amount.

The Company completed an examination of its Federal income tax return for the year ended December 31, 2015 by the Internal Revenue Service. The Company's U.S. Federal income tax returns filed for years 2016 and 2017 are open for examination by the Internal Revenue Service. The majority of the Company's state and local income tax returns filed for years 2015 through 2017 remain open for examination as well.

In accordance with ASC 740-10-25 - Income Taxes — Recognition, the Company performs reviews of its tax positions to determine whether it is “more likely than not” that its tax positions will be sustained upon examination, and if any tax positions are deemed to fall short of that standard, the Company reserves based on the financial exposure and the likelihood of its tax positions not being sustained. Based on its review as of December 31, 2018, the Company determined that it would not recognize tax benefits as follows (in thousands):

Balance at December 31, 2015	$2,285
Additions relating to current year	303
Payments of amounts relating to prior years	(1,287)
Balance at December 31, 2016	$1,301
Additions relating to 2017	416
Additions relating to prior years	24,297
Terminations of exposures relating to prior years	(619)
Balance at December 31, 2017	$25,395
Additions relating to 2018	269
Additions relating to prior years	4,425
Terminations of exposures relating to prior years	(702)
Balance at December 31, 2018	$29,387

If recognized, $2.3 million of the above positions will impact the Company's effective rate, while the remaining $27.1 million would result in adjustments to the Company's deferred taxes. On December 31, 2018, the Company filed a non-automatic accounting method change related to the chargebacks and rebates reserves that accounts for $27.1 million of the unrecognized tax benefits. It is pending approval from the Internal Revenue Service as of December 31, 2018 and as such the Company reasonably expects this balance to reverse during the following year. Due to the uncertainty of both timing and resolution of potential income tax examinations, the Company is unable to determine whether the remaining December 31, 2018 balance of unrecognized tax benefits represent tax positions that could significantly change during the next twelve months. The Company accounts for interest and penalties as income tax expense. In the year ended December 31, 2018, the Company recorded a reduction to penalties of $0.4 million and increased the interest by $4.5 million. The Company recorded the current year interest, net of tax benefit, of $1.7 million related to unrecognized tax benefits. At December 31, 2018, the Company had accrued a total of $8.6 million and $12.1 million of penalties and interest, respectively.

Note 12 — Segment Information

The Company has two operating segments, which constitute the Company's two reportable segments and the Company's CEO is the CODM, as defined in ASC Topic 280 - Segment Reporting. Our performance is assessed and resources allocated by the CODM based on the following two reportable segments:

- Prescription Pharmaceuticals
- Consumer Health

The Company's Prescription Pharmaceuticals segment principally consists of generic and branded prescription pharmaceuticals products which span a broad range of indications as well as a variety of dosage forms including: sterile ophthalmics, injectables and inhalants, and non-sterile oral liquids, topicals and nasal sprays. The Company's Consumer Health segment principally consists of animal health and OTC products, both branded and private label. OTC products include, but are not limited to, a suite of products for the treatment of dry eye sold under the TheraTears® brand name.

Financial information about the Company's reportable segments is based upon internal financial reports that aggregate certain operating information. The Company's CEO oversees operational assessments and resource allocations based upon the results of the Company's reportable segments, which have available and discrete financial information.

Selected financial information by reportable segment is presented below (in thousands):

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	Years ended December 31,		
	2018	2017	2016
REVENUES, NET:			
Prescription Pharmaceuticals	$620,669	$772,524	$1,053,579
Consumer Health	73,349	68,521	63,264
Total revenues, net	$694,018	$841,045	$1,116,843
GROSS PROFIT:			
Prescription Pharmaceuticals	$213,560	$402,082	$644,319
Consumer Health	32,456	30,124	29,193
Total gross profit	$246,016	$432,206	$673,512

The Company manages its business segments to the gross profit level and manages its operating and other costs on a company-wide basis. Inter-segment activity at the gross profit level is minimal. The Company does not have discrete assets by segment, as certain manufacturing and warehouse facilities support more than one segment, and therefore does not report assets by segment. Financial information including revenues and gross profit from external customers by product or product line is not provided, as to do so would be impracticable.

During the years ended December 31, 2018, 2017 and 2016, approximately $16.4 million, $25.5 million and $26.3 million of the Company's net revenue, respectively, was from customers located in foreign countries. All of the net revenue is related to our Prescription Pharmaceutical segment.

The carrying amounts of Goodwill by segment were as follows (in thousands):

	Prescription Pharmaceuticals	Consumer Health	Total
December 31, 2016	$ 267,576	$ 16,717	$284,293
Acquisitions and other adjustments	—	—	—
Impairments	—	—	—
Dispositions	—	—	—
Foreign currency translations	1,017	—	1,017
December 31, 2017	$ 268,593	$ 16,717	$285,310
Acquisitions and other adjustments	—	—	—
Impairments	—	—	—
Dispositions	—	—	—
Foreign currency translations	(1,431)	—	(1,431)
December 31, 2018	$ 267,162	$ 16,717	$283,879

Note 13 — Commitments and Contingencies

The Company has entered into strategic business agreements for the development and marketing of finished dosage form pharmaceutical products with various pharmaceutical development companies.

Each strategic business agreement includes a future payment schedule for contingent milestone payments and in certain strategic business agreements, minimum royalty payments. The Company will be responsible for contingent milestone payments and minimum royalty payments to these strategic business partners based upon the occurrence of future events. Each strategic business agreement defines the triggering event of its future payment schedule, such as meeting product development progress timeline, successful product testing and validation, successful clinical studies, various FDA and other regulatory approvals and other factors as negotiated in each agreement. None of the contingent milestone payments or minimum royalty payments is individually material to the Company.

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The Company is engaged in various supply agreements with third parties which obligate the Company to purchase various active pharmaceutical ingredients or finished products at contractual minimum levels. None of these agreements is individually or in aggregate material to the Company. Further, the Company does not believe at this time that any of the purchase obligations represent levels above that of normal business demands.

The table below summarizes contingent, potential milestone payments that would become due to strategic partners in the years 2019 and beyond, assuming all such contingencies occur (in thousands):

Year ending December 31,	Milestone Payments
2019	$ 4,658
2020	3,890
2021	2,650
2022 and beyond	1,800
Total	$ 12,998

The Company is a party in legal proceedings and potential claims arising in the ordinary course of its business. The amount, if any, of ultimate liability with respect to such matters cannot be determined. Despite the inherent uncertainties of litigation, management of the Company believes that the ultimate disposition of such proceedings and exposures will not have a material adverse impact on the financial condition, results of operations, or cash flows of the Company. Legal proceedings which may have a material effect on the Company have been further disclosed in Note 19 - “Legal Proceedings.”

Note 14 — Supplemental Cash Flow Information (in thousands)

	Year ended December 31,		
	2018	2017	2016
Amount paid for interest	$57,144	$45,472	$44,063
Amount paid for income taxes, net	9,261	42,003	132,695
Non-cash conversion of convertible notes to common shares	—	—	43,215
Accrued capital expenditures	$6,492	$13,824	$12,391

Note 15 – Recently Issued and Adopted Accounting Pronouncements

Recently Issued Accounting Pronouncements

In August 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. 2018-15 — Intangibles — Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (a consensus of the FASB Emerging Issues Task Force). The amendments in this Update align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this
Update. Accordingly, the amendments in this Update require an entity (customer) in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. Costs to develop or obtain internal-use software that cannot be capitalized under Subtopic 350-40, such as training costs and certain data conversion costs, also cannot be capitalized for a hosting arrangement that is a service contract. Therefore, an entity (customer) in a hosting

arrangement that is a service contract determines which project stage (that is, preliminary project stage, application development stage, or post-implementation stage) an implementation activity relates to. Costs for implementation activities in the application development stage are capitalized
depending on the nature of the costs, while costs incurred during the preliminary project and post-implementation stages are expensed as the activities are performed. The amendments in this Update also require the entity (customer) to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement. The term of the hosting arrangement includes the non-cancellable period of the arrangement plus periods covered by (1) an option to extend the arrangement if the customer is reasonably certain to exercise that option, (2) an option to terminate the

arrangement if the customer is reasonably certain not to exercise the termination option, and (3) an option to extend (or not to terminate) the arrangement in which exercise of the option is in the control of the vendor. The entity also is required to apply the existing impairment guidance in Subtopic 350-40 to the capitalized implementation costs as if the costs were long-lived assets. The amendments in this Update clarify that the capitalized implementation costs related to each module or component of a hosting arrangement that is a service contract are also subject to the guidance in Subtopic 360-10 on abandonment. The amendments in this Update also require the entity to present the expense related to the capitalized implementation costs in the same line item in the statement of income as the fees associated with the hosting element (service) of the arrangement and classify payments for capitalized implementation costs in the statement of cash flows in the same manner as payments made for fees associated with the hosting element. The entity is also required to present the capitalized implementation costs in the statement of financial position in the same line item that a prepayment for the fees of the associated hosting arrangement would be presented. The amendments in this ASU are effective for public business entities for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. For all other entities, the amendments in this Update are effective for annual reporting periods beginning after December 15, 2020, and interim periods within annual periods beginning after December 15, 2021. Early adoption of the amendments in this Update is permitted, including adoption in any interim period, for all entities. The amendments in this Update should be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The Company believes that the adoption of this ASU will not have a material impact on its financial position, results of operations or cash flows.

In August 2018, the FASB issued ASU No. 2018-13—Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement. The amendments in this Update modify the disclosure requirements on fair value measurements in Topic 820, Fair Value Measurement, based on the concepts in the Concepts Statement, including the consideration of costs and benefits. The FASB issued final guidance that removes, modifies and adds certain disclosure requirements for fair value measurements as part of its disclosure framework project as follows:
(a) Removals: The following disclosure requirements were removed from Topic 820:
1. The amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy
2. The policy for timing of transfers between levels
3. The valuation processes for Level 3 fair value measurements
(b) Modifications: The following disclosure requirements were modified in Topic 820:
1. For investments in certain entities that calculate net asset value, an entity is required to disclose the timing of liquidation of an investee’s assets and the date when restrictions from redemption might lapse only if the investee has communicated the timing to the entity or announced the timing publicly.
2. The amendments clarify that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date.
(c) Additions: The following disclosure requirements were added to Topic 820; however, the disclosures are not required for nonpublic entities:
1. The changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period
2. The range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) in lieu of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements.
In addition, the amendments eliminate "at a minimum" from the phrase "an entity shall disclose at a minimum" to promote the appropriate exercise of discretion by entities when considering fair value measurement disclosures and to clarify that materiality is an appropriate consideration. The amendments in this ASU are effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The amendments on

changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. Early adoption is permitted upon issuance of this Update. An entity is permitted to early adopt any removed or modified disclosures upon issuance of this ASU and delay adoption of the additional disclosures until their effective date. The Company believes that the adoption of this ASU will not have a material impact on its financial position, results of operations or cash flows.

In June 2018, the FASB ASU No. 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. The amendments in this Update expand the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. Under this ASU, an entity should apply the requirements of Topic 718 to nonemployee awards except for specific guidance on inputs to an option pricing model and the attribution of cost (that is, the period of time over which share-based payment awards vest and the pattern of cost

recognition over that period). The amendments specify that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. The amendments also clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606, Revenue from Contracts with Customers. The amendments in this ASU are effective for public entities for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. For all other entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than an entity's adoption date of Topic 606. The Company believes that the adoption of this ASU will not have a material impact on its financial position, results of operations or cash flows.

In February 2016, FASB issued ASU No. 2016-02 - Leases (Topic 842), as modified by subsequently issued ASUs 2018-10, 2018-11 and 2018-20 (collectively ASU 2016-02). ASU 2018-02 establishes a comprehensive new lease accounting model. The new standard clarifies the definition of a lease and causes lessees to recognize leases on the balance sheet as a lease liability with a corresponding right-of-use asset for leases with a lease term of more than one year. ASU 2016-02 is effective for financial statements issued for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted. The new standard initially required a modified retrospective transition for capital or operating leases existing at or entered into after the beginning of the earliest comparative period presented in the financial statements, but it does not require transition accounting for leases that expire prior to the date of initial application. In July 2018, the FASB decided to provide another transition method in addition to the existing transition method by allowing entities to initially apply the new leases standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. This additional transition method changes only when an entity is required to initially apply the transition requirements of the new leases standard; it does not change how those requirements apply. We expect to elect the practical expedient to not separate non-lease components, to not provide comparative reporting periods and the 'package of practical expedients', which permits us to forgo reassessment of our prior conclusions about lease identification, lease classification and initial direct costs for leases entered into prior to the effective date. We do not expect to elect the use-of-hindsight practical expedient. Upon adoption, operating leases will be reported on the statement of financial position as right-of-use assets and lease liabilities. The Company will adopt and implement this ASU on January 1, 2019 using the modified retrospective method and will not restate comparative periods. We have completed our review of all material leases including the search for any embedded leases, elected the package of practical expedients and accounting policy, and are currently finalizing our assessment of the overall financial statement impact. We expect this ASU will have a material impact on the Company's financial position and result in the Company recording operating Lease liabilities and Right-of-use asset balances of approximately $26 million. The impact on the Company's results of operations is not expected to materially differ from recorded amounts under ASC 840. The impact of the adoption of this ASU is non-cash in nature and is therefore not expected to materially affect the Company's cash flows.

Recently Adopted Accounting Pronouncements

In May 2017, the Financial Accounting Standards Board ("FASB") issued Accounting Standard Update ("ASU") No. 2017-09, Compensation — Stock Compensation (Topic 718): Scope of Modification Accounting, which provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. Per the ASU, an entity should account for the effects of a modification unless all the following are met: (1) The fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the modified award is the same as the fair value (or calculated value or intrinsic value, if such an alternative measurement method is used) of the original award immediately before the original award is modified. If the modification does not affect any of the inputs to the valuation technique that the entity uses to value the award, the entity is not required to estimate the value immediately before and after the modification, (2) The vesting conditions

of the modified award are the same as the vesting conditions of the original award immediately before the original award is modified, and (3) The classification of the modified award as an equity instrument or a liability instrument is the same as the classification of the original award immediately before the original award is modified. The current disclosure requirements in Topic 718 apply regardless of whether an entity is required to apply modification accounting under the amendments in this ASU. The ASU is effective for public business entities for annual and interim periods in fiscal years beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period, for (1) public business entities for reporting periods for which financial statements have not yet been issued and (2) all other entities for reporting periods for which financial statements have not yet been made available for issuance. The amendments in this ASU should be applied prospectively to an award modified on or after the adoption date. The standard was adopted on January 1, 2018, and did not have a material impact on the Company's consolidated financial statements or financial statement disclosures.

In March 2017, the FASB issued ASU No. 2017-07, — Compensation — Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which apply to all employers, including not-for-profit entities, that offer to their employees defined benefit pension plans, other postretirement benefit plans, or other types of benefits accounted for under Topic 715. The amendments in this ASU require that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost as defined in paragraphs 715-30-35-4 and 715-60- 35-9 are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations, if one is presented. If a separate line item or items are used to present the other components of net benefit cost, that line item or items must be appropriately described. If a separate line item or items are not used, the line item or items used in the income statement to present the other components of net benefit cost must be disclosed. The amendments in this ASU also allow only the service cost component to be eligible for capitalization when applicable (for example, as a cost of internally manufactured inventory or a self-constructed asset). The amendments in this ASU are effective for public business entities for annual periods beginning after December 15, 2017, including interim periods within those annual periods. Disclosures of the nature of and reason for the change in accounting principle are required in the first interim and annual periods of adoption. The amendments in this ASU should be applied retrospectively for the presentation of the service cost component and the other components of net periodic pension cost and net periodic postretirement benefit cost in the income statement and prospectively, on and after the effective date, for the capitalization of the service cost component of net periodic pension cost and net periodic postretirement benefit in assets. The amendments allow a practical expedient that permits an employer to use the amounts disclosed in its pension and other postretirement benefit plan note for the prior comparative periods as the estimation basis for applying the retrospective presentation requirements. Disclosure that the practical expedient was used is required. The standard was adopted on January 1, 2018, and did not have a material impact on the Company's consolidated financial statements or financial statement disclosures.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force), which addresses classification and presentation of changes in restricted cash on the statement of cash flows. The standard requires an entity’s reconciliation of the beginning-of-period and end-of-period total amounts shown on the statement of cash flows to include in cash and cash equivalents amounts generally described as restricted cash and restricted cash equivalents. The ASU does not define restricted cash or restricted cash equivalents, but an entity will need to disclose the nature of the restrictions. The ASU is effective for public business entities for annual and interim periods in fiscal years beginning after December 15, 2017. For all other entities, the ASU is effective for fiscal years beginning after December 15, 2018, and interim periods in fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. If an entity early adopts the amendments in an interim period, adjustments should be reflected at the beginning of the fiscal year that includes that interim period. Entities should apply this ASU using a retrospective transition method to each period presented. The standard was adopted on January 1, 2018, and did not have a material impact on the Company's consolidated financial statements or financial statement disclosures.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments. This standard amends and adjusts how cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years and will require adoption on a retrospective basis unless impracticable. If impracticable the Company would be required to apply the amendments prospectively as of the earliest date possible. The standard was adopted on January 1, 2018, and did not have a material impact on the Company's consolidated financial statements or financial statement disclosures.

In May 2014, FASB issued ASU 2014-09 - Revenue from Contracts with Customers (Topic 606), as modified by subsequently issued ASUs 2015-14, 2016-08, 2016-10, 2016-12 and 2016-20 (collectively ASU 2014-09). ASU 2014-09 superseded the revenue recognition requirements in ASC (Topic 605) Revenue Recognition, and most

industry specific guidance. This ASU also supersedes some cost guidance included in ASC 605-35 Revenue Recognition Construction Type and Production Type Contracts. Similar to the previous guidance, the Company makes significant estimates related to variable consideration at the point of sale, including chargebacks, rebates, product returns, and other discounts and allowances. Revenue is recognized at a point in time upon the transfer of control of the Company's products, which occurs upon delivery for substantially all of the Company's sales. The Company has adopted the practical expedient to exclude all sales taxes and contract fulfillment costs from the transaction price. The Company adopted the standard effective January 1, 2018 using the modified retrospective approach. The adoption of ASU 2014-09 did not have a material impact on the Company’s consolidated financial position, results of operations, equity or cash flows as of the adoption date or for the year ended December 31, 2018. See Note 16 — Customer, Supplier and Product Concentration for the disaggregation of net revenues by major customers.

Note 16 — Customer, Supplier and Product Concentration

Customer Concentration

In the years ended December 31, 2018, 2017 and 2016, a significant portion of the Company's gross and net sales reported were to three large wholesale drug distributors, and a significant portion of the Company's accounts receivable as of December 31, 2018, 2017 and 2016 were due from these wholesale drug distributors as well. AmerisourceBergen Health Corporation ("Amerisource"), Cardinal Health, Inc. ("Cardinal") and McKesson Drug Company ("McKesson") collectively referred to herein as the "Big 3 Wholesalers", are all distributors of the Company's products, as well as suppliers of a broad range of health care products. Aside from these three wholesale drug distributors, no other individual customer accounted for more than 10% or more of gross sales, net revenue or gross trade receivables for the indicated dates and periods.

If sales to the Big 3 Wholesalers were to diminish or cease, the Company believes that the end users of its products would find little difficulty obtaining the Company's products from another distributor. Further, the Company is subject to credit risk from its accounts receivable, more heavily weighted to the Big 3 Wholesalers, but as of and for the years ended December 31, 2018, 2017 and 2016, the Company has not experienced significant losses with respect to its collection of these gross accounts receivable balances.

The following table sets forth the Company's gross trade accounts receivable, gross sales and net revenue disaggregated by major customers for the periods indicated:

Gross Accounts Receivable as of December 31,

	2018		2017		2016	
Disaggregation of gross A/R by major customers	Gross Accounts Receivable	Gross Accounts Receivable %	Gross Accounts Receivable	Gross Accounts Receivable %	Gross Accounts Receivable	Gross Accounts Receivable %
Amerisource	$55,160	17.9 %	$99,771	26.3 %	$184,623	35.6 %
Cardinal	59,443	19.3 %	79,731	21.1 %	78,344	15.1 %
McKesson	149,000	48.3 %	146,321	38.6 %	172,468	33.2 %
Combined Total	263,603	85.5 %	325,823	86.0 %	435,435	83.9 %
Other	44,702	14.5 %	52,936	14.0 %	83,740	16.1 %
Grand Total	$308,305	100.0 %	$378,759	100.0 %	$519,175	100.0 %

Gross Sales YTD

	2018		2017		2016	
Disaggregation of gross sales by major customers	Gross Sales	Gross Sales %	Gross Sales	Gross Sales %	Gross Sales	Gross Sales %
Amerisource	$386,543	20.5 %	$554,690	23.6 %	$852,924	29.5 %
Cardinal	390,438	20.7 %	411,458	17.5 %	445,255	15.4 %
McKesson	789,620	41.8 %	918,157	39.1 %	939,662	32.5 %
Combined Total	1,566,601	83.0 %	1,884,305	80.2 %	2,237,841	77.4 %
Other	321,261	17.0 %	466,766	19.8 %	653,426	22.6 %
Grand Total	$1,887,862	100.0%	$2,351,071	100.0%	$2,891,267	100.0%

Net Revenue YTD

Disaggregation of net revenues by major customers	2018 Net Revenue	2018 Net Revenue %	2017 Net Revenue	2017 Net Revenue %	2016 Net Revenue	2016 Net Revenue %
Amerisource	$144,776	20.9 %	$160,671	19.1 %	$260,225	23.3 %
Cardinal	109,747	15.8 %	150,257	17.9 %	182,045	16.3 %
McKesson	173,363	25.0 %	222,715	26.5 %	270,276	24.2 %
Combined Total	427,886	61.7 %	533,643	63.5 %	712,546	63.8 %
Other	266,132	38.3 %	307,402	36.5 %	404,297	36.2 %
Grand Total	$694,018	100.0 %	$841,045	100.0 %	$1,116,843	100.0 %

Sales to the Big 3 Wholesalers primarily represent purchases of products in the Prescription Pharmaceuticals segment and generate the majority of the Prescription Pharmaceuticals segment revenue. The Prescription Pharmaceuticals segment revenue represented 89.4%, 91.9% and 94.3%, of the net revenue for the twelve months ended December 31, 2018, 2017 and 2016, respectively. Chain pharmacies are the major customers in the Consumer Health segment. For more information, see Note 12 — Segment Information.

Supplier Concentration

The Company requires a supply of quality raw materials and components to manufacture and package pharmaceutical products for its own use and for third parties with which it has contracted. The principal components of the Company's products are active and inactive pharmaceutical ingredients and certain packaging materials. Certain of these ingredients and components are available from only a single source and, in the case of certain of the Company's abbreviated new drug applications and new drug applications, only one supplier of raw materials has been identified. Because FDA approval of drugs requires manufacturers to specify their proposed suppliers of active ingredients and certain packaging materials in their applications, FDA approval of any new supplier would be required if active ingredients or such packaging materials were no longer available from the specified supplier. The qualification of a new supplier could delay the Company's development and marketing efforts. In addition, certain of the pharmaceutical products marketed by the Company are manufactured by a third party manufacturer, which serves as the Company's sole source of that finished product. If for any reason the Company is unable to obtain sufficient quantities of any of the raw materials or components required to produce and package its products, it may not be able to manufacture its products as planned, which could have a material adverse effect on the Company's business, financial condition and results of operations. Likewise, if the Company's manufacturing partners experience any similar difficulties in obtaining raw materials or in manufacturing the finished product, the Company's results of operations would be negatively impacted.

No individual supplier represented 10% or more of the Company's purchases in any of the years ended December 31, 2018, 2017 and 2016.

Product Concentration

In the year ended December 31, 2018, none of the Company's products represented 10% or more of total net revenue, while in the year ended December 31, 2017 and 2016, Ephedrine Sulfate Injection represented approximately 10% and 20% of the Company's total net revenue, respectively. The Company attempts to minimize the risk associated with product concentration by continuing to acquire and develop new products to add to its portfolio.

Note 17 — Related Party Transactions

During the years ended December 31, 2018, 2017 and 2016, the Company obtained legal services totaling $4.1 million, $0.8 million and $1.3 million, respectively, of which $1.3 million and $0.1 million was payable as of December 31, 2018 and 2017, respectively, from Polsinelli PC, a law firm for which the spouse of the Company’s Executive Vice President, General Counsel and Secretary is an attorney and shareholder.

The Company also obtained and paid legal services totaling $0.5 million during the year ended December 31, 2018 from Segal McCambridge Singer & Mahone, a firm for which the brother in law of the Company's Executive Vice President, General Counsel and Secretary is a partner.

The Company obtained support services for compliance with DSCSA requirements totaling $0.1 million during the year ended December 31, 2018 from Domino Amjet, Inc., a company for which the brother of the Company's Executive Vice President, General Counsel and Secretary is a Vice President of Sales.

Note 18 – Selected Quarterly Financial Data (Unaudited)

(In thousands, except per share amounts)	Revenues	Gross Profit	Operating (Loss) Income (1)(2)	Net (Loss) Income		
				Amount	Per Basic Share	Per Diluted Share
Year Ended December 31, 2018:						
4th Quarter	$153,386	$25,247	$(195,865)	$(215,038)	$(1.71)	$(1.71)
3rd Quarter	165,625	57,262	(75,980)	(70,140)	(0.56)	(0.56)
2nd Quarter	190,944	81,279	(91,166)	(87,984)	(0.70)	(0.70)
1st Quarter	184,063	82,228	(25,415)	(28,747)	(0.23)	(0.23)
Year Ended December 31, 2017:						
4th Quarter	$186,057	$82,905	$(121,601)	$(65,217)	$(0.52)	$(0.52)
3rd Quarter	202,428	97,763	8,760	(2,897)	(0.02)	(0.02)
2nd Quarter	199,140	102,769	14,244	2,537	0.02	0.02
1st Quarter	253,420	148,769	75,713	41,027	0.33	0.33

(1) The shift from an Operating income position in the first quarter of 2017, to an Operating loss in the fourth quarter 2017, was primarily due to impairments of Intangibles assets, net. See Note 5 - Goodwill and Other Intangible Assets for further details.

(2) The significant increase in Operating loss in the fourth quarter of 2018 compared to the prior 2018 quarters, was primarily due to impairments of Intangibles assets, net. See Note 5 - Goodwill and Other Intangible Assets for further details.

Note 19 – Legal Proceedings

The Company is a party to legal proceedings and potential claims arising in the ordinary course of our business. The amount, if any, of ultimate liability with respect to such matters cannot be determined, but despite the inherent uncertainties of litigation, management of the Company believes that the ultimate disposition of such proceedings and exposure will not have a material adverse impact on the financial condition, results of operations, or cash flows of the Company.

Litigation Related to the Merger

Akorn, Inc. v. Fresenius Kabi AG

On April 22, 2018, Fresenius Kabi AG delivered to Akorn a letter purporting to terminate the Merger Agreement. On April 23, 2018, Akorn filed a verified complaint entitled Akorn, Inc. v. Fresenius Kabi AG, Quercus Acquisition, Inc. and Fresenius SE & Co. KGaA, in the Court of Chancery of the State of Delaware for breach of contract and declaratory judgment. The complaint alleged, among other things, that (i) the defendants anticipatorily breached their obligations under the Merger Agreement by repudiating their obligation to close the Merger, (ii) the defendants knowingly and intentionally breached their obligations under the Merger Agreement by working to slow the antitrust

approval process and by engaging in a series of actions designed to hamper and ultimately block the Merger and (iii) Akorn had performed its obligations under the Merger Agreement, and was ready, willing and able to close the Merger. The complaint sought, among other things, a declaration that Fresenius Kabi AG's termination was invalid, an order enjoining the defendants from terminating the Merger Agreement, and an order compelling the defendants to specifically perform their obligations under the Merger Agreement to use reasonable best efforts to consummate and make effective the Merger. On April 30, 2018, the defendants filed a verified counterclaim alleging that, due primarily to purported data integrity deficiencies, the Company had breached representations, warranties and covenants in the Merger Agreement, and that it had experienced a material adverse effect. The verified counterclaim sought, among other things, a declaration that defendants' purported termination of the Merger Agreement was valid and that defendants were not obligated to consummate the transaction, and damages.

Following expedited discovery, from July 9 to 13, 2018, the Court of Chancery held a trial on the parties' claims (the "Delaware Action"). At the conclusion of trial, the Court of Chancery ordered post-trial briefing, which was completed on August 20, 2018, and a post-trial hearing, which was held on August 23, 2018.

On October 1, 2018, the Court of Chancery issued an opinion (the "Opinion") denying Akorn's claims for relief and concluding that Fresenius Kabi AG had validly terminated the Merger Agreement. The Court of Chancery concluded that Akorn had experienced a material adverse effect due to its financial performance following the signing of the Merger Agreement; that Akorn had breached representations and warranties in the Merger Agreement and that those breaches would reasonably be expected to give rise to a material adverse effect; that Akorn had materially breached covenants in the Merger Agreement; and that Fresenius was materially in compliance with its own contractual obligations. On October 17, 2018, the Court of Chancery entered partial final judgment against Akorn on its claims and in favor of the Fresenius parties on their claims for declaratory judgment. The Court of Chancery entered an order holding proceedings on the Fresenius parties' damages claims in abeyance pending the resolution of any appeal from the partial final judgment.

On October 18, 2018, Akorn filed a notice of appeal from the Opinion and the partial final judgment, as well as a motion seeking expedited treatment of its appeal. On October 23, 2018, the Delaware Supreme Court granted Akorn's motion for expedited treatment and set a hearing on Akorn's appeal for December 5, 2018. On December 7, 2018, the Delaware Supreme Court affirmed the Court of Chancery's opinion denying Akorn's claims for declaratory and injunctive relief and granting Defendants' counterclaim for a declaration that the termination was valid. On December 27, 2018, the Delaware Supreme Court issued a mandate returning the case to the Court of Chancery for consideration of all remaining issues, including the Fresenius parties' damages claims.

On January 15, 2019, the parties filed a joint letter to the Court of Chancery seeking thirty days to discuss the potential resolution of the Fresenius parties' damages claims. On February 19, 2019, the parties filed a joint letter advising the Court that they have been unable to resolve the Fresenius parties' damages claims. The Fresenius parties stated their intention to seek leave to amend their counterclaims to assert a new claim for fraud and that they would seek an expedited trial on such claim purportedly due to Akorn's financial condition. Akorn stated that it expected to oppose the motions for amendment and expedition, and that it would move to dismiss the Fresenius parties' damages claims in their entirety.

On February 20, 2019, the Fresenius parties filed a motion for leave to amend and supplement their counterclaim. The Fresenius parties' proposed amended and supplemented counterclaim alleges that Akorn fraudulently induced Fresenius to enter into the Merger Agreement and thereafter breached contractual representations and warranties and covenants therein. It seeks damages of approximately $102 million. On February 25, 2019, Akorn filed an opposition to the Fresenius parties' motion for leave to amend and supplement their counterclaim, arguing that the motion was untimely and prejudicial. On February 27, 2019, the Fresenius parties filed a reply in further support of their motion to file an amended and supplemented counterclaim. On February 28, 2019, the Court of Chancery denied the Fresenius parties' motion for leave to file an amended and supplemented counterclaim.

Other Matters

State of Louisiana v. Hi-Tech, et. al

The Louisiana Attorney General filed suit, Number 624,522, State of Louisiana v. Abbott Laboratories, Inc., et al., in the Nineteenth Judicial District Court, Parish of East Baton Rouge, Louisiana state court, including Hi-Tech Pharmacal and other defendants. Louisiana's complaint alleges that the defendants violated Louisiana state laws in connection with Medicaid reimbursement for certain vitamins, dietary supplements, and DESI products that were allegedly ineligible for reimbursement. After extensive motion and appellate practice, on October 3, 2017, the trial

court issued a judgment holding that for the one remaining claim, brought under Louisiana's unfair trade practices claim, Louisiana could not seek civil penalties for conduct pre-dating June 2, 2006. The defendants filed an application for supervisory writs with the Court of Appeal for the First Circuit on October 24, 2017, seeking reversal of the trial court's denial of their no cause of action exception with respect to the unfair trade practices claim, which the First Circuit denied the writ on July 24, 2018.

In re Akorn, Inc. Data Integrity Securities Litigation

On March 8, 2018, a purported shareholder of the Company filed a putative class action complaint entitled Joshi Living Trust v. Akorn, Inc. et al., in the United States District Court for the Northern District of Illinois alleging violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaint named as defendants the Company, Chief Executive Officer Rajat Rai, Chief Financial Officer Duane Portwood and Chief Accounting Officer Randall Pollard. The complaint alleged that defendants made materially false or misleading statements and/or material omissions by failing to disclose sooner

the existence of investigations into data integrity at the Company. The Complaint sought, among other things, an award of damages, attorneys' fees and expenses. The Company disputes these claims.

On May 31, 2018, the Court issued an order appointing Gabelli & Co. Investment Advisors, Inc. and Gabelli Funds, LLC as lead plaintiffs pursuant to the Private Securities Litigation Reform Act ("PSLRA"), approving their selection of lead counsel and liaison counsel and amending the case caption to In re Akorn, Inc. Data Integrity Securities Litigation. On June 14, 2018, lead plaintiffs filed a motion to lift the PSLRA stay of discovery. On June 22, 2018, the Company filed a memorandum in opposition to the motion to lift the PSLRA stay. On June 26, 2018, the Court denied the motion to lift the PSLRA stay, subject to entry of a preservation order.

On September 5, 2018, lead plaintiffs filed an amended complaint against the Company, Rajat Rai, Duane A. Portwood, Mark M. Silverberg, Alan Weinstein, Ronald M. Johnson, Brian Tambi, John Kapoor, Kenneth S. Abramowitz, Adrienne L. Graves, Steven J. Meyer and Terry A. Rappuhn. The amended complaint asserts (i) claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 (the "Fraud Claims") against Defendants Akorn, Rai, Portwood, Silverberg, Weinstein, Johnson and Tambi; and (ii) claims under Sections 14(a) and 20(a) of the Securities Exchange Act of 1934 (the "Proxy Claims") against defendants Akorn, Rai, Kapoor, Weinstein, Abramowitz, Graves, Johnson, Meyer, Rappuhn and Tambi. The amended complaint alleges that defendants knew or recklessly disregarded widespread institutional data integrity problems at Akorn's manufacturing and research and development facilities, while making or causing Akorn to make contrary misleading statements and omissions of material fact concerning the Company's data integrity at its facilities. The amended complaint alleges that corrective information was provided to the market on two separate dates, causing non-insider shareholders to lose over $1.07 billion and $613 million in value respectively. The amended complaint seeks an award of equitable relief and damages.

On October 29, 2018, the parties filed a stipulation and joint motion providing for the dismissal of certain claims and defendants. On October 30, 2018, the Court granted the parties' motion, dismissing the Proxy Claims without prejudice; dismissing defendants Kapoor, Abramowitz, Graves, Meyer and Rappuhn without prejudice; and dismissing Defendant Silverberg with prejudice.

On December 19, 2018, the remaining defendants filed an answer to the amended complaint, disputing the plaintiffs' remaining allegations. The parties are presently engaged in fact discovery.

Wickstrom v. Akorn, Inc. et al.

On February 21, 2019, Plaintiff Johnny Wickstrom, a purported shareholder of the Company, filed a putative class action complaint in the United States District Court for the Northern District of Illinois alleging violations of Sections 10(b) and 20(a) of the Securities Exchange Act of 1934. The complaint names as defendants the Company, Rajat Rai and Duane Portwood. The complaint alleged that defendants made materially false or misleading statements and/or material omissions concerning its compliance with U.S. Food and Drug Administration ("FDA") regulations and that those misstatements were corrected when the Company disclosed its receipt from the FDA of a warning letter at the Company's facility in Decatur, IL. The complaint seeks, among other things, an award of damages, attorneys' fees and expenses.

Kogut v. Akorn, et. al.

On March 8, 2016, a purported shareholder of the Company filed a putative derivative suit entitled Kogut v. Akorn, Inc., et al., in Louisiana state court in the Parish of East Baton Rouge. On June 10, 2016, the plaintiff filed an amended complaint asserting shareholder derivative claims alleging breaches of fiduciary duty in connection with the Company's accounting for its acquisition and the restatement of its financials. On September 23, 2016, the Company filed a motion to dismiss the case. The case was subsequently stayed. On September 21, 2018, the plaintiff filed a

second amended complaint, which added claims for shareholder derivative claims alleging breaches by certain present and former officers and directors of Akorn of fiduciary duties related to, among other matters, Akorn's compliance with U.S. Food and Drug Administration ("FDA") regulations and requirements regarding data integrity. On December 3, 2018, the Company and certain individual defendants moved to dismiss the complaint. Briefing on the motion to dismiss was completed on January 31, 2019.

In re Akorn, Inc. Shareholder Derivative Litigation

On October 15, 2018, Dale Trsar, a purported shareholder of the Company, filed a putative derivative suit captioned Trsar v. Kapoor, et al., in the Circuit Court of Cook County, IL. The suit alleged breaches by certain present and former officers and directors of Akorn of fiduciary duties related to, among other matters, Akorn's compliance with FDA regulations and

requirements regarding data integrity. On October 26, 2018, Trsar moved to dismiss the complaint voluntarily. On November 5, 2018, the Court granted Plaintiff Trsar's motion and dismissed the complaint without prejudice.

On November 6, 2018, Trsar filed a putative derivative complaint captioned Trsar v. Kapoor, et al. against defendants John N. Kapoor, Rajat Rai, Duane A. Portwood, Mark M. Silverberg, Alan Weinstein, Kenneth S. Abramowitz, Steven J. Meyer, Terry Allison Rappuhn, Adrienne L. Graves, Ronald M. Johnson and Brian Tambi in the United States District Court for the Northern District of Illinois (the "Trsar Action"). The complaint purports to allege derivatively on behalf of the Company that (i) the defendants breached their fiduciary duties to the Company and its shareholders by failing to address the Company's alleged non-compliance with FDA regulations; and (ii) the defendants violated Section 14(a) of the Securities Exchange Act of 1934, and SEC Rule 14a-9 promulgated thereunder, by making false or misleading statements in proxy statements issued to Akorn shareholders on November 14, 2016 and March 20, 2017. The complaint seeks an award of equitable relief and damages.

On December 10, 2018, Felix Glaubach, a purported shareholder of the Company, filed a putative derivative complaint captioned Glaubach v. Kapoor, et al. against John N. Kapoor, Rajat Rai, Mark M. Silverberg, Duane A. Portwood, Alan Weinstein, Kenneth S. Abramowitz, Steven J. Meyer, Terry Allison Rappuhn, Adrienne L. Graves, Ronald M. Johnson, and Brian Tambi in the United States District Court for the Northern District of Illinois (the "Glaubach Action"). The complaint purported to allege derivatively on behalf of the Company that (i) the defendants breached their fiduciary duties to the Company and its shareholders by failing to address the Company's alleged non-compliance with FDA regulations; (ii) John N. Kapoor and Brian Tambi breached their fiduciary duties to the Company and its shareholders by misappropriating inside information in connection with sales of the Company's stock; (iii) Rajat Rai and Duane A. Portwood were unjustly enriched; (iv) the Defendants wasted the Company's assets; and (v) the Defendants violated Section 14(a) of the Securities Exchange Act of 1934, and SEC Rule 14a-9 promulgated thereunder, by making false or misleading statements in proxy statements issued to the Company's shareholders. The complaint sought an award of equitable relief and damages. On January 11, the Glaubach Action was consolidated with the Trsar Action, with the complaint filed in the Trsar Action designated as operative, and the case caption was amended to In re Akorn, Inc. Shareholder Derivative Litigation.

On January 14, 2019, defendants filed a motion to dismiss the operative complaint in the consolidated action. Plaintiffs filed an opposition to defendants' motion to dismiss on February 14, 2019.

Pope v. Akorn Sales Inc. and Akorn, Inc.

On April 7, 2017, a jury in the State Court of Houston County in the State of Georgia reached a verdict of $20.5 million in damages against Akorn, Inc. in a product liability case, Ann Pope and Anthony Pope v. Horatio V. Cabasares, M.D., Horatio V. Cabasares, M.D., P.C. Houston Healthcare Systems, Inc., Akorn Sales, Inc., and Akorn, Inc., in which plaintiffs claimed the Company provided inadequate labeling on its product methylene blue. While an intermediate appellate decision affirmed the verdict on November 2, 2018, the Company filed a petition for certiorari with the Georgia Supreme Court on November 29, 2018, challenging liability as well as the compensatory and punitive damage awards.

The legal matters discussed above and others could result in losses, including damages, fines and civil penalties, and criminal charges, which could be substantial. We record accruals for these contingencies to the extent that we conclude that a loss is both probable and reasonably estimable. Regarding the aforementioned labeling verdict and intermediate appellate decision related to Methylene Blue Injection, the Company has recorded a $20.5 million liability as of December 31, 2018 for which a corresponding insurance receivable $10 million is also recorded. The Company maintains product liability insurance coverage in excess of the amount of the verdict and will seek to enforce its coverage rights in excess of the $10 million receivable noted above. The Company recorded a $5 million contingent liability as of December 31, 2018 related to damage claims. Regarding the other matters disclosed above,

the Company has determined that contingent liabilities associated with these legal matters are reasonably possible but they cannot be reasonably estimated. Given the nature of the litigation and investigations and the complexities involved, the Company is unable to reasonably estimate a possible loss for such matters until the Company knows, among other factors, (i) what claims, if any, will survive dispositive motion practice, (ii) the extent of the claims, including the size of any potential class, particularly when damages are not specified or are indeterminate, (iii) how the discovery process will affect the litigation, (iv) the settlement posture of the other parties to the litigation and (v) any other factors that may have a material effect on the litigation or investigation. However, we could incur judgments, enter into settlements or revise our expectations regarding the outcome of certain matters, and such developments could have a material adverse effect on our results of operations in the period in which the amounts are accrued and/or our cash flows in the period in which the amounts are paid.

Note 20 – Share Repurchases

In July 2016, the Company announced that the Board of Directors authorized a stock repurchase program (the "Stock Repurchase Program") pursuant to which the Company may repurchase up to $200.0 million of the Company’s common stock. The shares may be repurchased from time to time in open market transactions at prevailing market prices, in privately negotiated transactions or others, including accelerated stock repurchase arrangements, pursuant to a Rule 10b5-1 repurchase plan or by other means in accordance with federal securities laws. The timing and the amount of any repurchases will be determined by the Company’s management based on its evaluation of market conditions, capital allocation alternatives, and other factors. There is no guarantee as to the number of shares that will be repurchased, and the repurchase program may be suspended or discontinued at any time without notice and at the Company's discretion, and at this time no estimate to the effect on the results of the Company due to the Stock Repurchase Program can be made.

The Company did not repurchase any of its common stock during 2018 and 2017. During 2016, the Company repurchased 1.8 million shares at an average price of $24.89. In aggregate, over the life of the Stock Repurchase Program the Company has repurchased 1.8 million shares at an average purchase price of $24.89. As of December 31, 2018, the Company had $155.0 million remaining under the repurchase authorization.

Companies incorporated under Louisiana law are subject to the Louisiana Business Corporation Act ("LBCA"). Provisions of the LBCA eliminate the concept of treasury stock. As a result, all stock repurchases are presented as a reduction to issued shares of common stock, the stated value of common stock and retained earnings.

Note 21 — Pension plan and 401(k) Program

Akorn AG Pension Plan

The Company maintains a pension plan for its employees in Switzerland as required by law. The pension plan is funded by contributions by both employees and employers, with the sum of the contributions made by the employer required to be at least equal to the sum of the contributions made by employees. The Company contributes the necessary amounts required by local laws and regulations. Plan assets for the pension plan are held in a retirement trust fund with investments primarily in publicly traded securities and assets.

The purpose of this pension plan is to provide old age pensions. Some of the pension funds also provide benefits in case of disability and to the next of kin in case of premature death. Additionally, the pension funds can be used before retirement to buy a principal residence, to start an independent activity, or when leaving Switzerland permanently. If a participant leaves the company, accumulated pension funds are transferred either into a savings account or into the pension fund of a new employer.

The following table sets forth a summary of the defined benefit pension plan funded status:

Consolidated Financial Statement Position:	($ in thousands)	
	December 31,	
	2018	2017
Fair value of plan assets	$23,610	$24,281
Less: Benefit obligation	30,772	30,185
Funded status - Benefit obligation in excess of plan assets	$(7,162)	$(5,904)

The following table sets forth the change in plan assets:

Change in plan assets:	($ in thousands)	
	2018	2017
Fair value of plan assets, beginning of year	$24,281	$24,906
Actual return on plan assets	(409)	1,245
Participant contributions	753	646
Employer contributions	1,503	1,292
Benefits paid	(2,446)	(4,767)
Translation adjustments and other	(72)	959
Fair value of plan assets, end of year	$23,610	$24,281

The following table sets forth the change in benefit obligation:

Change in benefit obligation:	($ in thousands)	
	2018	2017
Benefit obligation, beginning of year	$30,185	$32,594
Service cost	2,166	1,982
Interest cost	197	253
Actuarial losses (gains)	771	(1,129)
Benefits paid	(2,446)	(4,767)
Translation adjustments and other	(101)	1,252
Benefit obligation, end of year	$30,772	$30,185

The following table sets forth the changes in items not yet recognized as a component of net periodic cost:

Changes in Unrecognized pension cost, pre-tax	($ in thousands)	
	2018	2017
Unrecognized pension cost, pre-tax, beginning of year	$(2,561)	$(4,546)
Amortization during year	(19)	120
Actuarial (losses) gains	(771)	1,129
Asset (losses) gains	(1,140)	472
Translation adjustments and other	$12	$264
Unrecognized pension cost, pre-tax, end of year	$(4,479)	$(2,561)

The following table sets forth the estimated amounts that will be amortized from accumulated other comprehensive (loss) into net periodic benefit cost in 2019:

Estimated amortization from Other Comprehensive Income into net periodic benefit cost in 2019:	($ in thousands)
Amortization of actuarial (losses)	$ (197)
Amortization of prior service credit	19
Estimated net (loss)	$ (178)

The following table sets forth the aggregated information for the pension plan:

	($ in thousands)	
	December 31,	
	2018	2017
Projected benefit obligation	$30,772	$30,185
Accumulated benefit obligation	30,583	29,985
Fair value of plan assets	$23,610	$24,281

The following table sets forth the components of net periodic cost for our pension plan:

Components of net periodic benefit cost	($ in thousands)		
	2018	2017	2016
Service cost	$2,166	$1,982	$2,087
Interest cost	197	253	238
Expected return on plan assets	(731)	(773)	(741)
Amortization of:			
Prior service cost (benefit)	(19)	(19)	—
Net actuarial loss	—	139	212
Participant contributions	(753)	(625)	(598)
Net periodic benefit cost	$860	$957	$1,198

We estimate the discount rate for our pension benefit obligation based on AA-AAA rated Swiss bonds. The expected rate of return on plan assets takes into consideration expected long-term returns based upon the weighted-average allocation of equities, fixed income and other asset components comprising the plan's assets at the plan's measurement date. The following tables set forth the key assumptions used to determine the net periodic cost for each fiscal year and the benefit obligation at fiscal year-end:

Key assumptions used to determine the net periodic cost:	2018	2017	2016
Discount rate	0.80 %	0.65 %	0.75 %
Expected rate of return on plan assets	3.00 %	3.00 %	3.00 %
Rate of increase in compensation levels	0.75 %	0.75 %	0.75 %

Key assumptions used to determine the benefit obligation:	2018	2017
Discount rate	0.80 %	0.65 %
Rate of increase in compensation levels	0.75 %	0.75 %

The pension plan's assets are invested with the objective of being able to meet current and future benefit payment needs, while maximizing total investment returns within the constraints of a prudent level of portfolio risk and diversification. The assets of the plan are diversified across asset classes to achieve an optimal balance between risk and return, and between income and growth of assets through capital appreciation. The following table sets forth the asset allocation of our pension plan assets, by category:

Plan assets by category:	December 31,	
	2018	2017
Debt securities	37.9 %	34.0 %
Equity securities	33.2 %	32.4 %
Real estate	15.4 %	4.3 %
Other	12.9 %	27.3 %
Cash and cash equivalents	0.6 %	2.0 %
Total Plan Assets	100.0%	100.0%

This pooled pension fund is held in a trust. This fund is comprised of various publicly traded securities and assets (equity, fixed income, reits, direct real estate and alternative investments). The trust does not have a separate portfolio for Akorn. Akorn is entitled to a proportion of the total assets of the trust. The fair value amounts were provided by the fund administrator who values at market the total portfolio in accordance with ASC 820 - Fair Value of Financial Instruments. The $23.6 million and $24.3 million represents the fair values of the plan assets as of December 31, 2018 and 2017, respectively. The fair value hierarchy of the plan assets for 2018 and 2017 was level II.

The Company expects to contribute approximately $1.3 million to the pension plan in 2019.

The following table sets forth the Company's estimated future benefit payments:

Year	($ in thousands)
2019	$ 1,477
2020	1,451
2021	1,316
2022	1,328
2023	1,278
Years 2024 - 2028	$ 7,317

Smart Choice! Akorn's 401(k) Program

All U.S. full-time Akorn employees are eligible to participate in the Company's 401(k) Plan. The Company matches the employee contribution to 50% of the first 6% of an employee's eligible compensation. Company matching contributions vest 50% after two years of credited service and 100% after three years of credited service. During the years ended December 31, 2018, 2017 and 2016, plan-related expenses totaled approximately $2.6 million, $2.6 million and $2.2 million, respectively. The Company's matching contribution is funded on a current basis.

Note 22 – Subsequent Events

On February 25, 2019, the Company made a decision to explore strategic alternatives for exiting its Paonta Sahib, Himachal Pradesh, India manufacturing facility. The Paonta Sahib facility has not yet been FDA approved. It is a sterile injectable facility with separate areas dedicated to general injectable products, carbapenem injectable products, cephalosporin injectable products and hormonal injectable products.

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

None.

Item 9A. Controls and Procedures.

(i) Evaluation of Disclosure Controls and Procedures

Our disclosure controls and procedures are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (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 reports we file or submit under the Exchange Act is accumulated and communicated to our management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of December 31, 2018, an evaluation was conducted under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) of the Exchange Act). Based on this evaluation, such officers have concluded that our disclosure controls and procedures are not effective as of December 31, 2018 solely because of the material weakness in our internal control over financial reporting described below.

(ii) Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). The Company's internal control over financial reporting is a process designed by, or under the supervision of, our Chief Executive Officer and Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Management, including our Chief Executive Officer and Chief Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control Integrated Framework (2013). It is Management's assessment that the Company did not maintain, in all material respects, effective internal control over financial reporting as of December 31, 2018 due to the Material Weakness described below.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

During the course of our evaluation, we determined that we did not design and maintain effective internal control over the accounting for Stock Award Modifications and we had a material calculation error on the separation package adjustments for certain executives departing the organization in 2018. Stock award modifications associated with executive departures are non-routine in nature. This resulted in a material corrected misstatement to expenses and income on the consolidated financial

statements that we did not prevent or detect timely. Accordingly, our management has determined that this control deficiency constitutes a material weakness.

(iii) Remediation Plan for Material Weakness in Internal Control over Financial Reporting

With oversight from the Audit Committee, the Company's management has begun to design and implement certain remediation measures to address the above-described material weakness and enhance the Company's internal control over financial reporting. We will take the following actions to improve the design and operating effectiveness of our internal control in order to remediate this material weakness:

- Review the processes related to the interpretation and calculation of Stock Award Accelerated Vesting to ensure compliance with GAAP.
- Evaluate, design, document, and implement additional control procedures related to the interpretation of calculation of awards with respect to accelerated vesting in conjunction with separation packages.
- Test and evaluate the design and operating effectiveness of the control procedures.
- Assess the effectiveness of the remediation plan.

We expect to complete our remediation plan during 2019. We believe the remediation measures will strengthen the Company's internal control over financial reporting and remediate the material weakness identified. We will continue to monitor the effectiveness of these remediation measures and will make any changes and take such other actions that we deem appropriate given the circumstances.

(iv) Changes in Internal Control over Financial Reporting

Other than the item described in the above "Management's Report on Internal Control over Financial Reporting", there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Incorporated by reference to the material under the caption “Executive Officers of the Company” in Part I of this Report on Form 10-K and the sections entitled “Corporate Governance and Related Matters” and “Proposal 1 - Election of Directors” in the definitive proxy statement for the 2019 annual meeting.

Item 11. Executive Compensation.

Incorporated by reference to the sections entitled “Executive Compensation and Other Information” in the definitive proxy statement for the 2019 annual meeting.

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

Incorporated by reference to the section entitled “Security Ownership of Certain Beneficial Owners and Management” in the definitive proxy statement for the 2019 annual meeting.

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

Incorporated by reference to the section entitled “Corporate Governance and Related Matters – Certain Relationships and Related Transactions” in the definitive proxy statement for the 2019 annual meeting.

Item 14. Principal Accounting Fees and Services.

Incorporated by reference to the section entitled “Proposal 2 - Ratification of the Appointment of BDO USA, LLP as the Company’s Independent Registered Public Accounting Firm for the Fiscal Year Ending December 31, 2019” in the definitive proxy statement for the 2019 annual meeting.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) Documents filed as part of this report.

(1) Financial Statements. The consolidated financial statements listed on the index to Item 8 of this Annual Report on Form 10-K are filed as a part of this Annual Report.

(2) Financial Statement Schedules. All financial statement schedules have been omitted since the information is either not applicable or required or is included in the financial statements or notes thereof.

(3) Exhibits. Those exhibits marked with a (*) refer to exhibits filed herewith. The other exhibits are incorporated herein by reference, as indicated in the following list. Those exhibits marked with a (†) refer to management contracts or compensatory plans or arrangements. Portions of the exhibits marked with a ( ) are the subject of a Confidential Treatment Request under 17 C.F.R. §§ 200.80(b)(4), 200.83 and 240.24b-2. Omitted material for which confidential treatment has been requested has been filed separately with the SEC.

Exhibit No.	Description
2.1	Agreement and Plan of Merger, dated as of August 26, 2013, by and among Akorn, Inc., Akorn Enterprises, Inc., and Hi-Tech Pharmacal Co., Inc., incorporated by reference to Exhibit 2.1 to Akorn's report on Form 8-K filed on August, 28, 2013.
2.2	Stock and Asset Purchase and License Agreement dated as of November 15, 2013 by and among Oak Pharmaceuticals, Inc., a wholly-owned subsidiary of Akorn, Inc., Merck & Co., Inc., Merck Sharp & Dohme Corp., and Inspire Pharmaceuticals, Inc., incorporated by reference to Exhibit 2.1 to Akorn's report on Form 8-K filed on November 21, 2013.
2.3	Agreement and Plan of Merger dated as of May 9, 2014 by and among Akorn Enterprises II, Inc., a wholly-owned subsidiary of Akorn, Inc., VPI Holdings Corp., and Tailwind Management LP, incorporated by reference to Exhibit 2.1 to Akorn's report on Form 8-K filed on May 12, 2014.
2.4	Product Acquisition Agreement dated as of September 30, 2014 by and among Oak Pharmaceuticals, Inc., a wholly-owned subsidiary of Akron, Inc., and Sunovion Pharmaceuticals, Inc., incorporated by reference to Exhibit 2.1 to Akorn's report on Form 8-K filed on October 1, 2014.
2.5	Agreement and Plan of Merger By and Among Fresenius Kabi AG, Quercus Acquisition, Inc., Akorn, Inc. and Fresenius SE & Co. KGAA dated as of April 24, 2017, incorporated by reference to Exhibit 2.1 to the report on Form 8-K filed by Akorn, Inc. on April 24, 2017.
2.6	Voting Agreement dated as of April 24, 2017, among Fresenius Kabi AG, Dr. John N. Kapoor and certain affiliates of Dr. Kapoor that are shareholders of Akorn, Inc., incorporated by reference to Exhibit 2.2 to the report on Form 8-K filed by Akorn, Inc. on April 24, 2017.

2.7	Voting Agreement dated as of April 24, 2017, among Fresenius Kabi AG, Rajat Rai and an affiliate of Mr. Rai that is a shareholder of Akorn, Inc., incorporated by reference to Exhibit 2.3 to the report on Form 8-K filed by Akorn, Inc. on April 24, 2017.
2.8	Voting Agreement dated as of April 24, 2017, between Fresenius Kabi AG and Joseph Bonaccorsi, incorporated by reference to Exhibit 2.4 to the report on Form 8-K filed by Akorn, Inc. on April 24, 2017.
2.9	Voting Agreement dated as of April 24, 2017, between Fresenius Kabi AG and Dr. Bruce Kutinsky, incorporated by reference to Exhibit 2.5 to the report on Form 8-K filed by Akorn, Inc. on April 24, 2017.
3.1	Restated Articles of Incorporation of Akorn, Inc. dated September 16, 2004, incorporated by reference to Exhibit 3.1 to Akorn, Inc.'s Registration Statement on Form S-1 filed on September 21, 2004 (Commission file No. 001-32360).
3.2	By-Laws of Akorn, Inc., as amended on April 24, 2017, incorporated by reference to Exhibit 3.1 to Akorn's report on Form 10-Q filed by Akorn, Inc. on May 4, 2017.

4.1	Modification, Warrant and Investor Rights Agreement, dated April 13, 2009, among Akorn, Inc., Akorn (New Jersey), Inc., and EJ Funds LP, incorporated by reference to Exhibit 4.2 to Akorn, Inc.'s report on Form 8-K filed on April 17, 2009.
4.2	Indenture dated as of June 1, 2011 by and between Akorn, Inc. and Wells Fargo Bank, National Association, as trustee, including the form of 3.50% Convertible Senior Note due 2016 (included as Exhibit A to the Indenture), incorporated by reference to Exhibit 4.1 to Akorn, Inc.'s report on Form 8-K filed on June 2, 2011.
10.1†	Form of Akorn, Inc. Non-Qualified Stock Option Agreement (May 2016), incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016.
10.2†	Form of Akorn, Inc. Incentive Stock Option Agreement (May 2016), incorporated by reference to Exhibit 10.2 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016.
10.3†	Form of Akorn, Inc. Restricted Stock Unit Award Agreement (May 2016), incorporated by reference to Exhibit 10.3 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016.
10.4†	Amended and Restated Akorn, Inc. 2003 Stock Option Plan, as amended, incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on March 8, 2012.
10.5†	Amended and Restated Akorn, Inc. 2014 Stock Option Plan incorporated by reference to Appendix B to Akorn, Inc.'s Definitive Proxy Statement filed on November 14, 2016.
10.6†	Akorn, Inc. 2016 Employee Stock Purchase Plan incorporated by reference to Appendix A to Akorn, Inc.'s Definitive Proxy Statement filed on November 14, 2016.
10.7†	Akorn, Inc. Omnibus Incentive Compensation Plan, incorporated by reference to Appendix A to the Definitive Proxy Statement on Schedule 14A filed by Akorn, Inc. on March 20, 2017.
10.8†	Akorn, Inc. 2017 Omnibus Incentive Compensation Plan - Form of Restricted Stock Unit Award Agreement, incorporated by reference to Exhibit 10.2 to the report on Form 10-Q filed by Akorn, Inc. on May 4, 2017.
10.9†	Akorn, Inc. 2017 Omnibus Incentive Compensation Plan - Form of Restricted Stock Unit Award (non-employee director), incorporated by reference to Exhibit 10.3 to the report on Form 10-Q filed by Akorn, Inc. on May 4, 2017.
10.10†	Form of Inducement Award - Non-qualified Options granted to Douglas Boothe on January 8, 2019, incorporated by reference to Exhibit 4.3 to the Akorn Inc. registration statement on Form S-8 filed on January 8, 2019.

10.11	†	Form of Inducement Award - Performance Stock Units granted to Douglas Boothe on January 8, 2019, incorporated by reference to Exhibit 4.4 to the Akorn Inc. registration statement on Form S-8 filed on January 8, 2019.
10.12	†	Form of Inducement Award - Restricted Stock Units granted to Douglas Boothe on January 8, 2019, incorporated by reference to Exhibit 4.5 to the Akorn Inc. registration statement on Form S-8 filed on January 8, 2019.
10.13	†	Form of Employment Agreement, dated December 22, 2010, between Akorn, Inc. and Joe Bonaccorsi, its Secretary, incorporated by reference to Exhibit 10.3 to Akorn, Inc.'s report on Form 8-K filed on December 28, 2010.
10.14	†	Form of Employment Agreement, dated April 11, 2014, between Akorn, Inc. and Raj Rai, its Chief Executive Officer, effective January 1, 2014, incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on April 16, 2014.
10.15	†	Form of Employment Agreement, dated April 11, 2014, between Akorn, Inc. and Bruce Kutinsky, its Chief Operating Officer, incorporated by reference to Exhibit 10.2 to Akorn, Inc.'s report on Form 8-K filed on April 16, 2014.
10.16	†	Letter Offer Agreement, dated October 13, 2014, as amended December 18, 2014, between Akorn, Inc. and Steve Lichter, incorporated by reference to Exhibit 10.13 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016
10.17	†	Letter Offer Agreement, dated March 5, 2015, between Akorn, Inc. and Jonathan Kafer, incorporated by reference to Exhibit 10.14 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016.

10.18†	Letter Offer Agreement, dated March 26, 2015, between Akorn, Inc. and Randall Pollard, incorporated by reference to Exhibit 10.15 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016.
10.19†	Letter Agreement, dated August 25, 2015, between Akorn, Inc. and Randall Pollard, incorporated by reference to Exhibit 10.16 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016.
10.20†	Letter Agreement, dated September 4, 2015, between Akorn, Inc. and Randall Pollard, incorporated by reference to Exhibit 10.17 to Akorn, Inc.'s report on Form 10-K for the fiscal year ended December 31, 2015, filed on May 10, 2016.
10.21†	Form of Employment Agreement, dated October 5, 2015, between Akorn, Inc. and Duane A. Portwood, its Chief Financial Officer, incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on October 13, 2015.
10.22†	Form of Letter Agreement, dated December 27, 2018, between Akorn, Inc. and Rajat Rai incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on December 28, 2018.
10.23†*	Form of Amendment #1 to Employment Agreement, dated April 11, 2014, between Akorn, Inc. and Raj Rai, its Chief Executive Officer, effective December 31, 2018.
10.24†	Form of Letter Agreement, dated January 7, 2019, between Akorn, Inc. and Bruce Kutinsky incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on January 7, 2019.
10.25†	Form of Offer Letter Agreement, dated January 28, 2019, between Akorn, Inc. and Christopher Young, incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on January 28, 2019.
10.26†*	Form of Separation and Consulting Agreement, dated February 5, 2019, between Akorn, Inc. and Rajat Rai.
10.27†*	Form of Separation and Consulting Agreement, dated February 5, 2019, between Akorn, Inc. and Bruce Kutinsky.
10.28†	Form of Offer Letter Agreement, dated December 20, 2018, between Akorn, Inc. and Douglas S. Boothe, incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on December 20, 2018.
10.29†	Form of Executive Agreement, dated December 20, 2018, between Akorn, Inc. and Douglas S. Boothe, its President and Chief Executive Officer, effective January 1, 2019, incorporated by reference to Exhibit 10.2 to Akorn, Inc.'s report on Form 8-K filed on December 20, 2018.
10.30	Series A-2 Preferred Stock Purchase Agreement dated as of August 1, 2011 by and between Akorn, Inc. and Aciex Therapeutics, Inc., incorporated by reference to Exhibit 10.2 to Akorn Inc.'s report on Form 10-Q filed on November 9, 2011.

10.31	Amendment #1 to Series A-2 Preferred Stock Purchase Agreement dated as of September 30, 2011 by and between Akorn, Inc. and Aciex Therapeutics, Inc., incorporated by reference to Exhibit 10.1 to Akorn Inc.'s report on Form 10-Q filed on November 9, 2011.
10.32	Lease Agreement dated July 15, 2010, by and between Veronica Development Associates, a New Jersey general partnership, and Akorn (New Jersey), Inc., an Illinois corporation, for the Company's 50,000 square foot manufacturing facility at 72-6 Veronica Avenue, Somerset, New Jersey, incorporate by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on July 30, 2010.
10.33	Loan Agreement dated as of April 17, 2014 among Akorn, Inc., with certain financial institutions as lenders (Lenders), and JPMorgan Chase Bank as administrative agent (Agent) for the Lenders, incorporated by reference to Exhibit 10.1 to Akorn Inc.'s report on Form 8-K filed on April 23, 2014.
10.34	Credit Agreement dated as of April 17, 2014 among Akorn, Inc., with certain financial institutions as lenders (Lenders), and JPMorgan Chase Bank as administrative agent (Agent) for the Lenders, incorporated by reference to Exhibit 10.2 to Akorn Inc.'s report on Form 8-K filed on April 23, 2014.

10.35	Incremental Facility Joinder Agreement dated as of August 12, 2014 among Akorn, Inc., with certain financial institutions as lenders (Lenders) and JPMorgan Chase Bank as administrative agent (Agent) for the Lenders, incorporated by reference to Exhibit 10.1 to Akorn Inc.'s report on Form 8-K filed on August 15, 2014.
10.36	ABL Consent Memorandum, dated as of May 19, 2015, among Akorn, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on May 20, 2015.
10.37	Term Loan Consent Memorandum, dated as of May 19, 2015, among Akorn, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, incorporated by reference to Exhibit 10.2 to Akorn, Inc.'s report on Form 8-K filed on May 20, 2015.
10.38	ABL Consent Memorandum, dated as of November 13, 2015, among Akorn, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, incorporated by reference to Exhibit 10.1 to Akorn, Inc.'s report on Form 8-K filed on November 13, 2015.
10.39	Term Loan Consent Memorandum, dated as of November 13, 2015, among Akorn, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as administrative agent, incorporated by reference to Exhibit 10.2 to Akorn, Inc.'s report on Form 8-K filed on November 13, 2015.
21.1*	Listing of Subsidiaries of Akorn, Inc.
23.1*	Consent of BDO USA, LLP, Independent Registered Public Accounting Firm
31.1*	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a).
31.2*	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a).
32.1*	Certification of the Chief Executive Officer pursuant to 18 USC Section 1350.
32.2*	Certification of the Chief Financial Officer pursuant to 18 USC Section 1350.
101	The financial statements and footnotes from the Akorn, Inc. Annual Report on Form 10-K for the year ended December 31, 2018, filed on March 1, 2019 formatted in XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statement of Shareholders' Equity, (iv) Consolidated Statements of Cash Flows and (v) Notes to Consolidated Financial Statements.

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Item 16. Form 10-K Summary

None.

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.

AKORN, INC.

By: /s/ DOUGLAS S. BOOTHE
Douglas S. Boothe
President and Chief Executive Officer

Date: March 1, 2019

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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/ DOUGLAS S. BOOTHE Douglas S. Boothe	President and Chief Executive Officer and Director	March 1, 2019
/s/ DUANE A. PORTWOOD Duane A. Portwood	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	March 1, 2019
/s/ RANDALL E. POLLARD Randall E. Pollard	Senior Vice President, Finance and Chief Accounting Officer (Principal Accounting Officer)	March 1, 2019
/s/ ALAN WEINSTEIN Alan Weinstein	Director, Chairman of the Board	March 1, 2019
/s/ KENNETH S. ABRAMOWITZ Kenneth S. Abramowitz	Director	March 1, 2019
/s/ ADRIENNE L. GRAVES Adrienne L. Graves	Director	March 1, 2019
/s/ RONALD M. JOHNSON Ronald M. Johnson	Director	March 1, 2019
/s/ STEVEN J. MEYER Steven J. Meyer	Director	March 1, 2019
/s/ THOMAS G. MOORE Thomas G. Moore	Director	March 1, 2019
/s/ TERRY ALLISON RAPPUHN Terry Allison Rappuhn	Director	March 1, 2019
/s/ BRIAN TAMBI Brian Tambi	Director	March 1, 2019

Exhibit Index

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