

Perrigo®

Quality, Affordable **Self-Care** Products™



FROM THE CEO



Dear Fellow Shareholders,

In 2019, we introduced a new self-care vision and consumer-focused strategy that expanded our opportunities and frame of reference for growth. By leveraging both our core competencies and shifting consumer preferences towards self-care, the management team and Board aggressively pushed forward with Perrigo's transformation and the opportunity to create significant value for our shareholders.

Over the course of the year, we made substantial progress toward the multifaceted transformation strategy that we set out at our investor day in May. We invested in innovation, expanded our portfolio and capabilities, and reconfigured our portfolio, by completing two notable transactions and divesting non-core assets to better align Perrigo's business with our new vision. We also had over \$230 million in new product sales, drove 50% e-commerce growth, and made investments in our organizational effectiveness as well as in existing and new growth platforms.

We are thrilled to see our consumer self-care strategy become the basis for everything that we do at Perrigo. We are equally proud of the significant actions and achievements in 2019 that demonstrate a return to Perrigo's winning ways. As our transformation continues to unfold, I am confident that these key actions will unlock significant, long-term shareholder value.

To that end, I want to thank our shareholders for placing their trust in us and in our vision - *To make lives better by bringing Quality, Affordable Self-Care Products™ that consumers trust everywhere they are sold.* Change is never easy, but it has infused the Company with new energy and passion. Together, we are advancing consumer health and wellness.

As I said when I joined the Company in October 2018, Perrigo has an amazing core business that is fundamentally solid. In 2019, Perrigo delivered – for the benefit of our shareholders, employees, consumers, customers and business partners. The need for self-care has never been more important given the unprecedented challenges the world is facing, and Perrigo is well-positioned to support global communities during this time. We look forward to continued success in 2020 and beyond.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Kessler', written in a cursive style.

Murray S. Kessler

President and Chief Executive Officer

**“We are
thrilled to see
our consumer
self-care strategy
become the basis
for everything
that we do at
Perrigo.”**

WHAT DRIVES US?

The best companies have a simple vision that every employee in the organization understands and believes in. In 2019, we shared our new Company vision: *To make lives better by bringing Quality, Affordable Self-Care Products™ that consumers trust everywhere they are sold.*

This vision drives our unwavering commitment to consumers and customers and is the guiding light of the organization. All processes and corporate energy are dedicated to advancing this vision, and we are moving away from any activity that is not aligned with this vision.

What Does Our Vision Mean?

- **To make lives better** gives us purpose, which is to make a positive social impact
- **by bringing** embodies our world-class supply chain, with its ability to manufacture a broad range of dosage forms with unmatched efficiency
- **Quality, Affordable** acknowledges our ability to deliver what consumers want while recognizing our strong heritage as the value leader
- **Self-Care Products** positions Perrigo as a consumer products company that enables wellness for everyone
- **that consumers trust** reminds us of our responsibility to deliver safe, effective, and socially responsible products every day to those who depend on them
- **everywhere they are sold** challenges us to meet consumer expectations in the global marketplace.

What is Self-Care?

Self-care is deeply personal and unique to each person's needs and preferences. According to the Oxford Dictionary, self-care is "the practice of taking an active role in protecting one's well-being and happiness, in particular during periods of stress, or taking action to preserve and improve one's health." We view self-care in much the same way.



WHY SELF-CARE?

83%

of Millennials say private label is of the same quality as national brands

85%

of consumers report they trust private brands at least as much as national brands

3.7%

CAGR for annual healthcare expenditures per capita between 2011 and 2018

88%

of individuals see self-care as an important part of their lives

+250%

increase in Google searches for the term self-care in the last 3 years

There are several reasons why expanding Perrigo's position in the self-care space makes sense. Notably, Perrigo is already a self-care provider to millions of consumers across the globe. We are at the center of the self-care movement, with Perrigo's self-care products empowering individuals to take control of their health and wellness. Equally as important are the shifting consumer preferences toward self-care, which further Perrigo's strategy and leverage our core competencies in the private label and self-care markets.

Driven by our strategy, Perrigo has already begun to evolve its foothold in self-care, providing not just treatments, but prevention and wellness products as well.



Source: IRI, Brand Disruptions Next Phase – The Goldman Sachs Group, Inc; Self-care Roadmap Global Market Development Center; Centers for Medicare & Medicaid Services, Gallup research

OUR TRANSFORMATION

In 2019, Perrigo established a clear path to transform the Company operationally and financially through a multifaceted strategy that strengthens our position as a leader in self-care.

With this strategy in place and an organization of approximately 11,200 full-time and temporary employees worldwide committed to its execution, now more than ever, Perrigo can make lives better by bringing *Quality, Affordable Self-Care Products™* that consumers trust everywhere they are sold. Moreover, the Company is well positioned to deliver consistent and sustainable results.

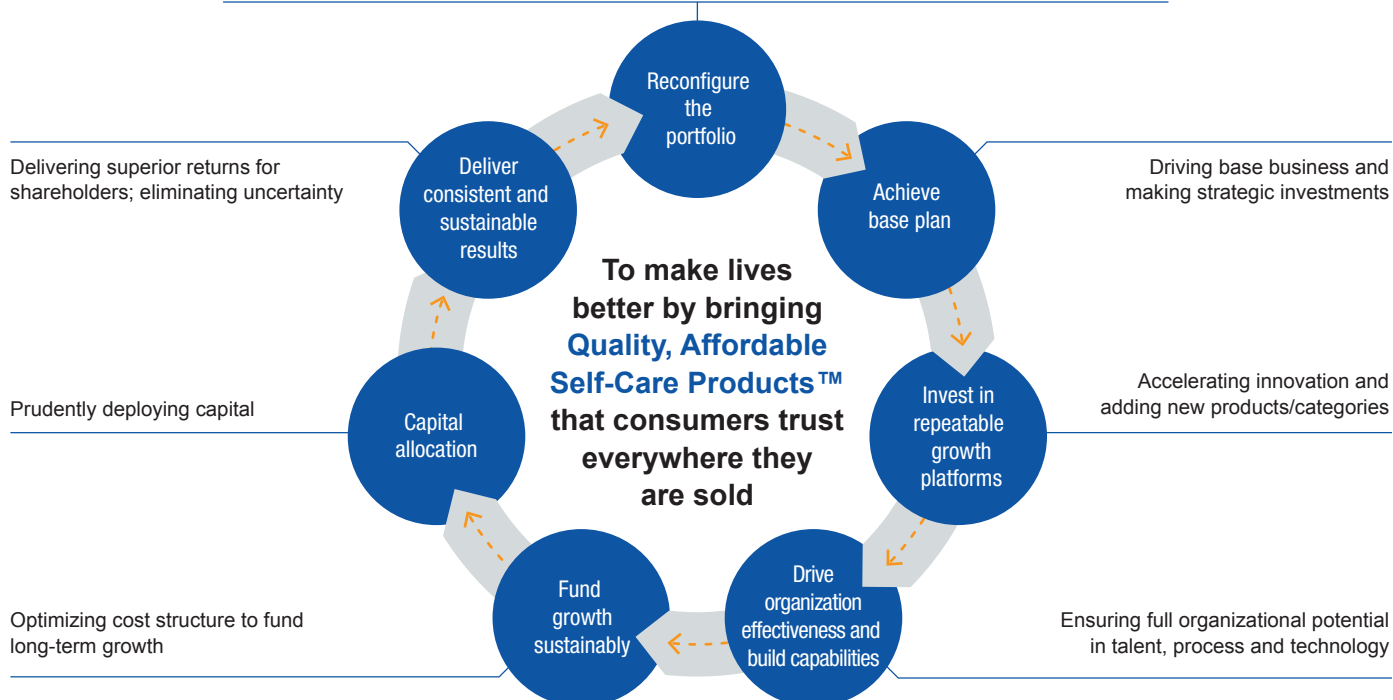


Pursuing Adjacent Self-Care Categories

In 2019 Perrigo accelerated its growth in self-care by entering the oral care category. Specifically, Perrigo acquired Ranir Global Holdings, LLC, the leading global private label supplier of oral self-care products, with a comprehensive portfolio of 300+ highly customized oral care products.

Perrigo Transformation Playbook

Adding bolt-on Consumer Self-Care businesses while continuing to assess options for an RX separation





Supporting Our Transformation

Over the course of the year, Perrigo made significant progress against its transformation, delivering on each element of the Company's seven-part strategy.

1. Reconfigure the Portfolio

We continued to reconfigure our portfolio to align with our self-care strategy. In 2019, we acquired Ranir, the leading private label oral care company globally with a comprehensive portfolio of 300+ highly customized oral care solutions. We also acquired Prevacid®24HR, a well-established branded heartburn product that fits well in our self-care portfolio. In addition to these acquisitions, we divested the U.S. Animal Health business and continued to review options for the RX segment.

2. Achieve Base Plan

We focused on driving our core consumer businesses forward, by working strategically with our retail customers to grow store brand share in the U.S. and launching differentiated self-care brands throughout Europe. Importantly, we delivered accelerated organic growth from new products and market share gains. Over the course of 2019, we proudly had +\$230 million in new product sales, including XLS Medical Forte 5, a next generation weight loss product within the lifestyle category, and the Pure Glow range of products under the ACO brand in the dermatological category. In addition, our e-commerce sales grew an impressive 50% versus the prior year.

\$230M 
in new product sales in 2019

3. Invest in Repeatable Global Platforms

Traditionally, Perrigo's product development platform focused on creating National Brand Equivalent products. Over the course of 2019, we began building our consumer research infrastructure to enable us to evolve from that position and develop products that are National Brand Better and National Brand Different. We also continued to invest in innovation, potentially adding \$500 million of new products via 50+ new innovation programs, and to examine new potential avenues of growth, such as

expanding the oral care and nicotine cessation categories and exploring new categories, such as cannabidiol (CBD).



The Magic of Store Brands

Consumers have growing confidence in buying over-the-counter medications to prevent and treat acute and chronic conditions. They continue to see the value of store brands in supporting their health and wellness and retailers value store brands as a major contributor to their profits.



Store Brand

Retail Price: \$22.49
Cost: \$14.50
\$ Profit: \$7.99
% Profit: 36%

vs.

National Brand

Retail Price: \$28.99
Cost: \$24.13
\$ Profit: \$4.86
% Profit: 17%

Consumer Savings
22%



Store Brand

Retail Price: \$55.99
Cost: \$23.49
\$ Profit: \$32.50
% Profit: 58%

vs.

National Brand

Retail Price: \$71.99
Cost: \$54.45
\$ Profit: \$17.54
% Profit: 24%

Consumer Savings
22%

4. Drive Organizational Effectiveness and Build Capabilities

In 2019, we took several actions to enhance effectiveness across the organization, including creating a Transformation Office to oversee all transformation-related organizational activities; strengthening key leadership roles; centralizing key functions, including R&D; and investing in automation and technology to bolster business intelligence and eliminate inefficiencies across the organization.

5. Fund Growth Sustainably

We initiated our 'Project Momentum' cost savings program in 2019, which we expect to generate approximately \$30 million in savings per year over the next three years. Reducing non-essential professional services and improving advertising and promotion efficiency will also contribute to these savings. We anticipate that these actions will generate cost savings that can in turn be invested in innovation, technology and enhancing our existing capabilities.

6. Capital Allocation

We remain committed to our disciplined capital allocation strategy, primarily focused on bolt-on acquisitions, capacity building, innovation investments and growing dividends, all supporting long-term shareholder value creation.

7. Deliver Consistent and Sustainable Results¹

We are proud of our results in 2019, highlighted by a 36% increase in our stock price and adjusted net sales growth of 6.1%², excluding currency, and a solid 2.8%³ organic growth. This organic growth is in line with our stated long-term objective of driving 3/5/7 – 3% revenue growth, 5% adjusted operating income growth and 7% adjusted diluted earnings per share growth. We also met or beat its Wall Street consensus adjusted diluted earnings per share estimate each quarter of 2019.

¹ See Perrigo Company plc Reconciliation of Non-GAAP Measures for reconciliation of Adjusted (non-GAAP) to Reported GAAP.

² Adjusted net sales growth excludes the exited animal health and infant foods businesses from CSCA, reverses certain product returns relating to the voluntary global market withdrawal of ranitidine in the third quarter of 2019, and are on a constant currency basis. This means that foreign currency sales recorded in 2019 are converted to US dollars using the average exchange rate in effect during 2018.

³ Adjusted organic net sales growth excludes the 2019 acquisition of Ranir from CSCA and CSCI, excludes the exited animal health and infant foods businesses from CSCA in both periods, reverses certain product returns relating to the voluntary global market withdrawal of ranitidine in the third quarter of 2019, and are on a constant currency basis. This means that foreign currency sales recorded in 2019 are converted to US dollars using the average exchange rate in effect during 2018.



Building on Successful Brands

In 2019, Perrigo expanded on Europe's leading weight loss brand with the launch of XLS Medical Forte 5, which helps consumers lose up to five times more weight than dieting alone.

OUR SOCIAL RESPONSIBILITY

At Perrigo, we take our duty towards good corporate citizenship seriously, and we are rooted in our long heritage of promoting healthy living and responsible business practices. While our new consumer self-care vision shifted the Company's strategic focus, it continues to embody our enduring commitment to sustainability and corporate citizenship. By empowering consumers to support their own health and wellness, Perrigo's business goals and social responsibilities are powerfully aligned.

Perrigo is committed to doing business in a socially, environmentally and fiscally responsible manner. That commitment includes: 1) creating a healthy work environment that empowers our employees; 2) conducting business ethically; and 3) using our natural resources responsibly.

Focusing on Our Employees

The passion and energy our employees inject in everything they do is the fuel enabling Perrigo to ***make lives better by bringing Quality, Affordable Self-Care Products™ that consumers trust everywhere they are sold.*** Perrigo is committed to fostering an environment that values our employees' knowledge and skills, protects them on the job, encourages optimal health and mirrors the diverse group of customers and consumers that rely on our products.

Our people not only inject life into our vision and performance, but they also inject life into the communities in which they live and work. The corporate and personal generosity extended to strengthen our surrounding communities has cultivated a sense of organizational pride that sets the tone for our global organization while enriching the world around us.

Focusing on Corporate Citizenship

Offering health and wellness solutions that empower consumers to proactively prevent or treat manageable conditions means that our commitment to quality and sustainability cannot be limited to regulatory requirements; it also must be embedded into our culture. We take pride in the quality of our products and partnerships and strive to be good stewards of the environment, including continuously seeking ways to reduce our environmental footprint.

\$3.2 million
donated to charitable
organizations in 2019

\$268,000 awarded
in academic
scholarships in 2019

>\$23 million
donated to charitable
organizations over
the past 10 years

\$1.5 million
in product donations

24% GHG reduction
since 2015,
exceeding our 2020
goal a year early

426% recycling
increase since 2015
at North American
Base of Operations

PERRIGO'S CORPORATE SOCIAL RESPONSIBILITY THROUGH THE YEARS

2000

The Perrigo Company Charitable Foundation is established. The Foundation supports the Company's philanthropic efforts with the vision: to help improve and positively impact communities by improving access to quality health services, creating educational opportunities, and supporting the needs of the under-served

2015

The Environmental Stewardship Program is implemented to measure and track energy, water and waste data throughout each of Perrigo's global sites and facilities. In turn, this data is used to not only measure the current performance, but to also drive initiatives that will reduce our usage and ultimately improve our environmental footprint.

2016

A formal sustainability target is set to reduce our Greenhouse Gas Emissions (GHG) by 15% by 2020. We exceeded that goal a year early!

2017

Perrigo joined the How2Recycle® initiative to help consumers understand the correct way to recycle product packaging.

2018

Perrigo joined the Roundtable for Sustainable Palm Oil (RSPO), adopted the organization's principles related to sustainable palm oil and certified our primary infant formula manufacturing sites to the RSPO standards.



Expanding Key Categories

In Europe, Perrigo leveraged its deep experience in dermatology by extending its successful brand, ACO, and launching ACO Sensitive Balance in 2019. This product is specially adapted for sensitive skin, with prebiotics that improve the skin's natural balance, deep-acting hyaluronic acid to provide long-lasting hydration and panthenol that soothes and strengthens the skin barrier.



SHAREHOLDER INFORMATION

Board of Directors

Rolf A. Classon

Chairman of the Board

Bradley A. Alford

Director; Operating Partner of Advent International Corporation

Adriana Karaboutis

Director; Chief Information and Digital Officer for National Grid

Murray S. Kessler

Director; President and Chief Executive Officer of Perrigo Company plc

Jeffrey B. Kindler

Director; Chief Executive Officer for Centrexion Corporation

Erica L. Mann

Director; Former President of Bayer Consumer Health Division

Donal O'Connor

Director; Retired Partner, PwC Ireland

Geoffrey M. Parker

Director; Chief Financial Officer for Tricida, Inc.

Theodore R. Samuels

Director; Retired President of Capital Guardian Trust Company

Senior Management

Murray S. Kessler

President and Chief Executive Officer

Raymond P. Silcock

Chief Financial Officer

Svend Andersen

Executive Vice President and President, Consumer Self-Care International

James E. Dillard III

Executive Vice President and Chief Scientific Officer

Thomas M. Farrington

Executive Vice President and Chief Information Officer

Ronald C. Janish

Executive Vice President of Global Operations and Supply Chain and Chief Transformation Officer

Todd W. Kingma

Executive Vice President, General Counsel and Secretary

Sharon Kochan

Executive Vice President and President, Rx Pharmaceuticals

Jeffrey R. Needham

Executive Vice President and President, Consumer Self-Care Americas

Grainne Quinn

Executive Vice President and Chief Medical Officer

Rich Sorota

Incoming Executive Vice President and President, Consumer Self-Care Americas

Robert E. Willis

Executive Vice President and Chief Human Resources Officer

Corporate Headquarters

Sharp Building

10-12 Hogan Place

Telephone: +353 1 709 4000

Registered in Ireland

Registration Number 529592

North American Base of Operations

515 Eastern Avenue

Allegan, Michigan 49010

Telephone: (269) 673-8451

Common Stock

Stock Symbol: PRGO

Listed: New York Stock Exchange

Independent Registered Public Accounting Firm

Ernst & Young

Grand Rapids, Michigan

Stockholder Information

Questions concerning stock ownership may be directed to Investor Relations at Bradley.Joseph@perrigo.com.

Stock Transfer Agent

Computershare

P.O. Box 43078

Providence, RI 02940

(800) 622-6757

<https://www.computershare.com>

Annual Meeting of Shareholders

Wednesday, May 6, 2020, 8:00 a.m. (IST), The Westin Hotel, The Guinea Room, College Green, Westmoreland Street, Dublin 2, Ireland

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the year ended December 31, 2019
or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _____ to _____
Commission file number **001-36353**



Perrigo Company plc

(Exact name of registrant as specified in its charter)

Ireland

N/A

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification No.)

The Sharp Building, Hogan Place, Dublin 2, Ireland D02 TY74
+353 1 7094000

(Address, including zip code, and telephone number, including
area code, of registrant's principal executive offices)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Ordinary shares, €0.001 par value	PRGO	New York Stock Exchange

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

None

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files).

Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Emerging growth company

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.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes No

The aggregate market value of the voting stock held by non-affiliates of the registrant, based upon the closing sale price of our ordinary shares on June 28, 2019 as reported on the New York Stock Exchange, was \$6,477,490,316. Ordinary shares held by each director or executive officer have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 21, 2020, the registrant had 136,126,977 outstanding ordinary shares.

Documents incorporated by reference:

The information called for by Part III will be incorporated by reference from the Registrant's definitive Proxy Statement for its Annual Meeting of Shareholders to be filed pursuant to Regulation 14A or will be included in an amendment to this Form 10-K.

PERRIGO COMPANY PLC
FORM 10-K
YEAR ENDED DECEMBER 31, 2019
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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

Certain statements in this report are “forward-looking statements” within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and are subject to the safe harbor created thereby. These statements relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our, or our industry’s actual results, levels of activity, performance or achievements to be materially different from those expressed or implied by any forward-looking statements. In particular, statements about our expectations, beliefs, plans, objectives, assumptions, future events or future performance contained in this report, including certain statements contained in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” are forward-looking statements. In some cases, forward-looking statements can be identified by terminology such as “may,” “will,” “could,” “would,” “should,” “expect,” “plan,” “anticipate,” “intend,” “believe,” “estimate,” “forecast,” “predict,” “potential” or the negative of those terms or other comparable terminology.

We have based these forward-looking statements on our current expectations, assumptions, estimates and projections. While we believe these expectations, assumptions, estimates and projections are reasonable, such forward-looking statements are only predictions and involve known and unknown risks and uncertainties, many of which are beyond our control, including: the timing, amount and cost of any share repurchases; future impairment charges; the success of management transition; customer acceptance of new products; competition from other industry participants, some of whom have greater marketing resources or larger market shares in certain product categories than we do; pricing pressures from customers and consumers; resolution of uncertain tax positions, including the Company’s appeal of the Notice of Assessment (“NoA”) issued by the Irish Office of the Revenue Commissioners (“Irish Revenue”) and the draft and final Notices of Proposed Adjustment (“NOPAs”) issued by the U.S. Internal Revenue Service and the impact that an adverse result in any such proceeding could have on operating results, cash flows and liquidity; potential third-party claims and litigation, including litigation relating to our restatement of previously-filed financial information and litigation relating to uncertain tax positions, including the NoA and NOPAs; potential impacts of ongoing or future government investigations and regulatory initiatives; potential costs and reputational impact of product recalls and sales halts; the impact of tax reform legislation and healthcare policy; general economic conditions; fluctuations in currency exchange rates and interest rates; the consummation of announced acquisitions or dispositions and the success of such transactions, and our ability to realize the desired benefits thereof; and our ability to execute and achieve the desired benefits of announced cost-reduction efforts, and strategic and other initiatives. An adverse result with respect to our appeal of any material outstanding tax assessments or litigation, including securities or drug pricing matters, could ultimately require the use of corporate assets to pay such assessments, damages from third-party claims, and related interest and/or penalties, and any such use of corporate assets would limit the assets available for other corporate purposes. Statements regarding the separation of the RX business, including the expected benefits, anticipated timing, form of any such separation and whether the separation ultimately occurs, are all subject to various risks and uncertainties, including future financial and operating results, our ability to separate the business, the effect of existing interdependencies with our manufacturing and shared service operations, and the tax consequences of the planned separation to us or our shareholders. Furthermore, we may incur additional tax liabilities in respect of 2016 and prior years or be found to have breached certain provisions of Irish company law in connection with our restatement of our previously filed financial statements, which may result in additional expenses and penalties. These and other important factors, including those discussed in this report under “Risk Factors” and in any subsequent filings with the United States Securities and Exchange Commission, may cause actual results, performance or achievements to differ materially from those expressed or implied by these forward-looking statements. The forward-looking statements in this report are made only as of the date hereof, and unless otherwise required by applicable securities laws, we disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

TRADEMARKS, TRADE NAMES AND SERVICE MARKS

This report contains trademarks, trade names and service marks that are the property of Perrigo Company plc, as well as, for informational purposes, trademarks, trade names, and service marks that are the property of other organizations. Solely for convenience, certain trademarks, trade names, and service marks referred to in this report appear without the ®, ™ and ™ symbols, but those references are not intended to indicate that we or the applicable owner, as the case may be, will not assert, to the fullest extent under applicable law, our or their rights to such trademarks, trade names, and service marks.

PART I.

ITEM 1. BUSINESS

Perrigo Company plc was incorporated under the laws of Ireland on June 28, 2013. We became the successor registrant to Perrigo Company, a Michigan corporation, on December 18, 2013 in connection with the acquisition of Elan Corporation, plc ("Elan"). Unless the context requires otherwise, the terms "Perrigo", the "Company", "we," "our," "us," and similar pronouns used herein refer to Perrigo Company plc, its subsidiaries, and all predecessors of Perrigo Company plc and its subsidiaries.

WHO WE ARE

We are dedicated to making lives better by bringing “*Quality, Affordable Self-Care Products™*” that consumers trust everywhere they are sold. We are a leading provider of over-the-counter ("OTC") health and wellness solutions that enhance individual well-being by empowering consumers to proactively prevent or treat conditions that can be self-managed. We are also a leading producer of generic prescription pharmaceutical topical products such as creams, lotions, gels, and nasal sprays. We are headquartered in Ireland and sell our products primarily in North America and Europe as well as in other markets around the world.

Our vision is designed to support our shifting focus to our consumer branded and store brand portfolio and our global reach and the opportunities for growth we see ahead of us, while remaining loyal to our heritage. Our vision represents an evolution from healthcare to self-care, which takes advantage of a massive global trend and opens up a large number of adjacent growth opportunities. We define self-care as not just treating disease or helping individuals feel better after taking a product, but also maintaining and enhancing their overall health and wellness. In 2019, Perrigo’s management and Board of Directors launched a three-year strategy to transform the Company into a consumer self-care leader, consistent with our vision. Significant progress was made in the first year of our transformation journey towards achieving the major components of management’s transformation strategy, which consists of: reconfiguring the portfolio, delivering on base plans, creating repeatable platforms for growth, driving organizational effectiveness and capabilities, increasing productivity, allocating capital and delivering consistent and sustainable results in line with consumer-packaged goods peers.



Segments

Segment Reporting Change

During the three months ended March 30, 2019, we changed the composition of our operating and reporting segments. We moved our pharmaceuticals and diagnostic businesses in Israel from the Consumer Self-Care International segment to the Prescription Pharmaceuticals segment and we made certain adjustments to our allocations between segments. These changes were made to reflect changes in the way in which management makes operating decisions, allocates resources, and manages the growth and profitability of the Company.

Our new reporting and operating segments are as follows:

- **Consumer Self-Care Americas ("CSCA")**, formerly Consumer Healthcare Americas, comprises our consumer self-care business (OTC, contract manufacturing, infant formula, and oral self-care categories and our divested animal health category) in the U.S., Mexico and Canada.
- **Consumer Self-Care International ("CSCI")**, formerly Consumer Healthcare International, comprises our branded consumer self-care business primarily in Europe and Australia, our consumer-focused business in the United Kingdom and parts of Asia, and our liquid licensed products business in the United Kingdom.
- **Prescription Pharmaceuticals ("RX")** comprises our prescription pharmaceuticals business in the U.S. and our pharmaceuticals and diagnostic businesses in Israel, which were previously in our CSCI segment.

We previously had two legacy segments, Specialty Sciences and Other, which contained our Tysabri[®] financial asset and active pharmaceutical ingredient ("API") businesses, respectively, which we divested. Following these divestitures, there were no substantial assets or operations left in either of these segments. Effective January 1, 2017, all expenses associated with our former Specialty Sciences segment were moved to unallocated expenses. Financial information related to our business segments can be found in [Item 8. Note 20](#). Our segments reflect the way in which our management makes operating decisions, allocates resources and manages the growth and profitability of the Company.

MAJOR DEVELOPMENTS IN OUR BUSINESS

Ranir Global Holdings, LLC Acquisition

On July 1, 2019, we acquired 100% of the outstanding equity interest in Ranir Global Holdings, LLC ("Ranir"), a privately-held company. After post-closing adjustments, the total cash consideration paid was \$747.7 million, net of \$11.5 million cash acquired.

Ranir is headquartered in Grand Rapids, Michigan, and is a leading global supplier of private label and branded oral self-care products. This transaction advances our transformation to a consumer-focused, self-care company while enhancing our position as a global leader in consumer self-care solutions. Ranir operations will be reported in our CSCA and CSCI segments (refer to [Item 8. Note 3](#)).

Planned RX Separation

We previously announced a plan to separate our RX business, which, when completed, will enable us to focus on expanding our consumer-focused businesses. In 2019, we continued preparations related to our planned separation, which may include a possible sale, spin-off, merger or other form of separation. While we remain committed to transforming to a consumer-focused business, we have not committed to a specific date or form for the separation. In connection with the proposed separation, we have incurred significant preparation costs and will continue to incur costs that, when completed, will be in the range of \$45.0 million to \$80.0 million, excluding restructuring expenses and transaction costs, depending on the timing and final structure of the transaction.

Internal Revenue Service Notice of Proposed Adjustments

On August 22, 2019, we received a draft NOPA from the IRS with respect to our fiscal tax years ended June 28, 2014 and June 27, 2015, relating to the deductibility of interest on \$7.5 billion in debts owed to Perrigo Company plc by Perrigo Company, a Michigan corporation and wholly-owned indirect subsidiary of Perrigo

Company plc. The debts were incurred in connection with the Elan merger transaction in 2013. The draft NOPA would cap the interest rate on the debts for U.S. federal tax purposes at 130.0% of the Applicable Federal Rate (a blended rate reduction of 4.0% per annum from the rates agreed to by the parties), on the stated ground that the loans were not negotiated on an arms'-length basis. As a result of the proposed interest rate reduction, the draft NOPA proposes a reduction in gross interest expense of approximately \$480.0 million for fiscal years 2014 and 2015. If the IRS were to prevail in its proposed adjustment, we estimate an increase in tax expense for such fiscal years of approximately \$170.0 million, excluding interest and penalties. In addition, we would expect the IRS to seek similar adjustments for the period from June 28, 2015 through December 31, 2019. If those further adjustments were sustained, based on our preliminary calculations and subject to further analysis, our current best estimate is that the additional tax expense would not exceed \$200.0 million, excluding interest and penalties, for the period June 28, 2015 through December 31, 2019. We do not expect any similar adjustments beyond December 31, 2019 as proposed regulations, issued under section 267A of the Internal Revenue Code, would eliminate the deductibility of interest on this debt. We strongly disagree with the IRS position and will pursue all available administrative and judicial remedies. No payment of any amount related to the proposed adjustments is required to be made, if at all, until all applicable proceedings have been completed.

On April 26, 2019, we received a revised NOPA from the IRS regarding transfer pricing positions related to the IRS audit of Athena for the years ended December 31, 2011, 2012 and 2013. The NOPA carries forward the IRS's theory from its 2017 draft NOPA that when Elan took over the future funding of Athena's in-process research and development after acquiring Athena in 1996, Elan should have paid a substantially higher royalty rate for the right to exploit Athena's intellectual property, rather than rates based on transfer pricing documentation prepared by Elan's external tax advisors. The NOPA proposes a payment of \$843.0 million, which represents additional tax and a 40.0% penalty. This amount excludes consideration of offsetting tax attributes and potentially material interest. We strongly disagree with the IRS position and will pursue all available administrative and judicial remedies, including potentially those available under the U.S. - Ireland Income Tax Treaty to alleviate double taxation. No payment of the additional amounts is required until the matter is resolved administratively, judicially, or through treaty negotiation. While we believe our position to be correct, there can be no assurance of an ultimate favorable outcome, and if the matter is resolved unfavorably it could have a material adverse impact on our liquidity and capital resources.

Irish Tax Appeals Commission Notice of Amended Assessment

On October 30, 2018, we received an audit finding letter from the Irish Office of the Revenue Commissioners ("Irish Revenue") for the years ended December 31, 2012 and December 31, 2013. The audit finding letter relates to the tax treatment of the 2013 sale of the Tysabri[®] intellectual property and other assets related to Tysabri[®] to Biogen Idec from Elan Pharma. The consideration paid by Biogen to Elan Pharma took the form of an upfront payment and future contingent royalty payments. Irish Revenue issued a Notice of Amended Assessment ("NoA") on November 29, 2018, which assesses an Irish corporation tax liability against Elan Pharma in the amount of €1,636 million, not including interest or any applicable penalties.

We disagree with this assessment and believe that the NoA is without merit and incorrect as a matter of law. We filed an appeal of the NoA on December 27, 2018 and will pursue all available administrative and judicial avenues as may be necessary or appropriate. In connection with that, Elan Pharma was granted leave by the Irish High Court on February 25, 2019 to seek judicial review of the issuance of the NoA by Irish Revenue. The judicial review filing is based on our belief that Elan Pharma's legitimate expectations as a taxpayer have been breached, not on the merits of the NoA itself. The High Court has scheduled a hearing in this judicial review proceeding in April 2020, and we would expect a decision in this matter in the second half of 2020. If we are ultimately successful in the judicial review proceedings, the NoA will be invalidated and Irish Revenue will not be able to re-issue the NoA. The proceedings before the Tax Appeals Commission have been stayed until a decision on the judicial review application has been made. If for any reason the judicial review proceedings are ultimately unsuccessful in establishing that Irish Revenue's issuance of the NoA breaches our legitimate expectations, Elan Pharma will reactivate its appeal to challenge the merits of the NoA before the Tax Appeals Commission. While we believe our position to be correct, there can be no assurance of an ultimate favorable outcome, and if the matter is resolved unfavorably it could have a material adverse impact on our liquidity and capital resources.

Refer to [Item 1A. Risk Factors - Tax Related Risks](#) and [Item 8. Note 15](#).

API Divestitures

During the year ended December 31, 2017, we completed the sale of our India API business to Strides Shasun Limited for \$22.2 million in proceeds. Prior to closing the sale, we determined that the carrying value of the India API business exceeded its fair value less the cost to sell, resulting in an impairment charge of \$35.3 million, which was recorded in Impairment charges on the Consolidated Statements of Operations for the year ended December 31, 2016.

During the year ended December 31, 2017, we completed the sale of our Israel API business to SK Capital, for a sale price of \$110.0 million.

Financial Asset

During the year ended December 31, 2017, we divested the Tysabri[®] financial asset to Royalty Pharma for \$2.2 billion in upfront cash and up to \$250.0 million and \$400.0 million in milestone payments. We received the \$250.0 million royalty payment on February 22, 2019. In order for us to receive the milestone payment related to 2020 of \$400.0 million, the payments received by Royalty Pharma from Biogen for Tysabri[®] sales in 2020 must exceed \$351.0 million. The 2018 Royalty Pharma payments from Biogen for Tysabri[®] were \$337.5 million.

We elected to account for the contingent milestone payments using the fair value option method, and these were recorded at an estimated fair value of \$134.5 million as of December 31, 2017. Upon Tysabri[®] meeting the 2018 global net sales threshold we recorded a \$170.1 million gain in Change in financial assets. The fair value of the milestone payment related to 2020 is \$95.3 million as of December 31, 2019.

NEW PRODUCTS

We consider a product to be new if it (i) was reformulated, (ii) was a product line extension due to changes in characteristics such as strength, flavor, or color, (iii) had a change in product status from "prescription only" ("Rx") to OTC, (iv) was a new store brand or branded launch, (v) was provided in a new dosage form or (vi) was sold to a new geographic area with different regulatory authorities, in all cases, within 12 months prior to the end of the period for which net sales are being measured. During the year ended December 31, 2019, new product sales were \$230.5 million.

CONSUMER SELF-CARE AMERICAS

Overview

The CSCA segment is focused primarily on the sale of store brand, self-care products in categories including upper respiratory, pain and sleep-aids, digestive health, nutrition, vitamins, minerals and supplements, healthy lifestyle, skincare and personal hygiene, and oral self-care in the U.S., Mexico, Canada, and South America. We are a leading provider of self-care products sold to consumers via store brands. Consumer awareness and knowledge of the quality and value that OTC store brand products represent continues to grow due to efforts made by store brand customers, retailers, and wholesalers to promote their own label programs. We also provide consumer self-care products under our own brands. During the year ended December 31, 2019, our CSCA segment represented approximately 51% of consolidated net sales.

The CSCA segment develops, manufactures, and markets store brand, self-care products that are comparable in quality and effectiveness to national brands. Store brand products must meet the same U.S. Food and Drug Administration ("FDA") requirements as national brands within the U.S. and the requirements of comparable regulatory bodies outside the U.S. In most instances our product packaging is designed to invite and reinforce comparison to national brand products, while communicating store brand value to consumers.

The cost of store brand products to retailers is significantly lower than that of comparable nationally advertised brand name products. Generally, retailers' dollar profit per unit of store brand product is greater than the dollar profit per unit of the comparable national brand product. The retailer, therefore, can price a store brand product below the competing national brand product and realize a greater profit margin. The consumer benefits by

receiving a high-quality product at a price below the comparable national brand product. As a result, our business model results in consumers saving money on their self-care needs.

We are dedicated to continuing to be the leader in developing and marketing new store brand products and have a research and development ("R&D") staff that we believe is one of the most experienced in the industry at developing products comparable in formulation and quality to national brand products. In order to offer consumers product features or benefits that national brand companies do not offer, we have recently implemented a product development strategy to differentiate store brand products from national brands. Our R&D team also responds to changes in existing national brand products by reformulating existing products. For example, in the OTC pharmaceutical market, certain new products are the result of changes in product status from Rx to OTC. These "Rx-to-OTC switches" require FDA approval through a process initiated by the drug innovator. The drug innovator usually begins the process by filing a New Drug Application ("NDA"), which is often followed by a competitor filing an Abbreviated New Drug Application ("ANDA"). New drugs are also marketed through the FDA's OTC monograph process, which allows us to produce drugs that are generally recognized as safe and effective without pre-marketing approval. In the oral self-care category, we focus on creating products that are equivalent to the national brands, and also partner with our customers to create exclusive brands and differentiated products. We rely on both internal R&D and strategic product development agreements with outside sources to develop new products.

The CSCA segment also develops, manufactures, and distributes certain branded products, which are consistent with the segment's self-care strategy. Branded products sold under brand names include Prevacid[®]24HR, Good Sense[®], Zephrex D[®], ScarAway[®], Plackers[®], and Rembrandt[®].

We manufacture a significant portion of our CSCA segment's products at our plants located in the U.S., Mexico, China, and Israel, and we source the remaining product materials from third parties. In addition, in order to maximize both our capacity and sales of proprietary formulas, we engage in contract manufacturing, which involves producing unique ANDAs and monograph products through partnerships with major pharmaceutical and direct-to-consumer companies.

We believe the increasing age of the global population, continued rising healthcare costs, and consumers who proactively prevent or treat conditions will drive the need for the enhanced value that our products provide to consumers. In addition, we believe that new products and products switching from Rx to OTC status (as described above) will continue to drive growth within the segment.

Recent Developments

- On February 20, 2020, we entered into a definitive agreement to acquire the oral care assets of High Ridge Brands for cash of \$113.0 million. The transaction is expected to close in the first quarter of 2020 subject to bankruptcy court approval in connection with High Ridge Brands' Chapter 11 cases, as well as other customary closing conditions. This transaction, in combination with our existing children's oral self-care portfolio, provides a new platform for disruptive product innovation in the form of exclusive store and value brand programs that challenge current national brand oral care offerings.
- On January 3, 2020, we acquired Steripod[®], a leading toothbrush accessory brand and innovator in the toothbrush protector market, from Bonfit America Inc. The acquisition, which includes a portfolio of antibacterial toothbrush protectors, kids' toothbrush protectors and tongue cleaners, complements our current portfolio of oral self-care products, and leverages our manufacturing and marketing platform. Operating results attributable to the products will be included in our CSCA segment. Total consideration paid was \$24.7 million, subject to customary post-closing adjustments (refer to [Item 8. Note 22](#)).
- On November 29, 2019, we acquired the branded OTC rights to Prevacid[®]24HR from GlaxoSmithKline for \$61.5 million. The acquisition of Prevacid[®]24HR expands our U.S. OTC presence with a leading brand in our digestive health product category (refer to [Item 8. Note 3](#)).

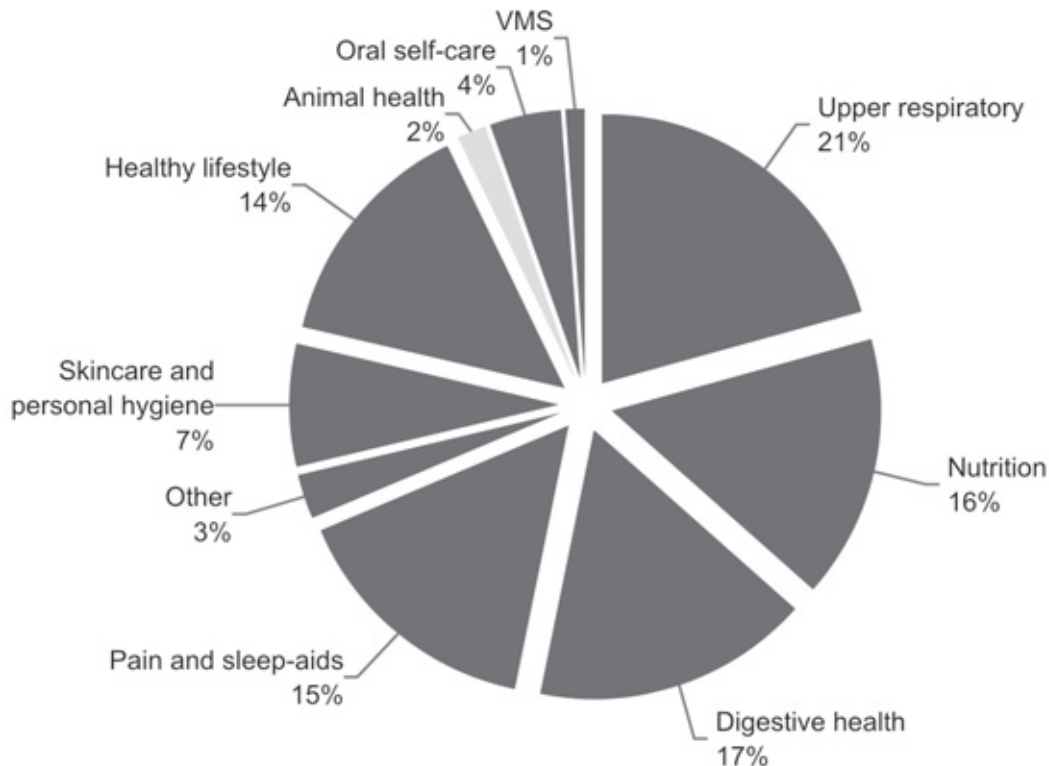
- During the three months ended September 28, 2019, after worldwide regulatory bodies announced that Ranitidine may potentially contain N-nitrosodimethylamine ("NDMA"), a known environmental contaminant, we promptly began testing our externally-sourced Ranitidine API and Ranitidine-based products. On October 8, 2019, we halted shipments of the product based upon preliminary results. Based on the totality of data gathered, we made the decision to conduct a voluntary retail market withdrawal, which resulted in a decrease in net sales of \$7.4 million and a decrease in gross profit of \$15.5 million in our CSCA segment.
- On July 8, 2019, we completed the sale of our animal health business to PetIQ for cash consideration of \$182.5 million, which resulted in a pre-tax gain of \$71.7 million recorded in Other (income) expense, net on the Consolidated Statements of Operations (refer to [Item 8. Note 3](#)).
- On July 1, 2019, we acquired Ranir, a privately-held leading global supplier of private label and branded oral self-care products, for \$747.7 million. This transaction advances our transformation to a consumer-focused, self-care company while enhancing our position as a global leader in consumer self-care solutions (refer to [Item 8. Note 3](#)).
- On April 1, 2019, we purchased the ANDAs and other records and registrations of Budesonide Nasal Spray, a generic equivalent of Rhinocort Allergy[®] and Triamcinolone Nasal Spray, a generic equivalent of Nasacort Allergy[®], from Barr Laboratories, Inc., a subsidiary of Teva Pharmaceuticals, for a total of \$14.0 million in cash (refer to [Item 8. Note 3](#)).

Products

As we continue to transform to a consumer-focused, self-care company, we re-aligned our product categories as of December 31, 2019. The re-alignment standardizes our categories and product level detail to provide consistency across our consumer segments. This transformative step will optimize the way in which management reports and evaluates our business. Our CSCA segment offers products in the following categories:

Product Category	Description
Pain and sleep-aids	Products comprised of pain relievers, fever reducers and sleep-aids.
Upper respiratory	Products that relieve upper respiratory symptoms, including cough suppressants, expectorants, and sinus relief.
Digestive health	Products such as antacids, anti-diarrheal, and anti-heartburn that relieve symptoms associated with digestive issues.
Nutrition	Infant formulas and nutritional beverages.
Healthy lifestyle	Products that help consumers live a healthy lifestyle such as smoking cessation, diabetes care, and well-being products.
Skincare and personal hygiene	Products for the face and body such as dermatological care, scar management, lice treatment, and other products for various skin conditions.
Oral self-care	Products used for oral care, including toothbrushes, toothbrush replacement heads, floss, flossers, and whitening products.
Vitamins, minerals and supplements ("VMS")	Vitamins, minerals, and supplements.
Other	Diagnostic products and other miscellaneous self-care products.

The chart below reflects net sales by product category in the CSCA segment, which includes net sales from our OTC contract manufacturing business and our now-divested animal health business for the year ended December 31, 2019.



We launched several new CSCA products in the year ended December 31, 2019, most notably Loperamide Simethicone, Nicotine cherry ice mint mini lozenge, and a store brand infant formula launch at a major retailer. During the year ended December 31, 2019, new product sales in the CSCA segment were \$36.2 million.

We, on our own or in conjunction with partners, received final FDA approval from U.S. health authorities for three new products within the CSCA segment in the year ended December 31, 2019, and as of December 31, 2019, we had three new product applications pending FDA approval.

Sales and Marketing

Our customers include major global, national, and regional retail drug, supermarket, and mass merchandise chains such as Walmart, Costco, CVS, Kroger, Target, Walgreens Boots Alliance, Dollar General, Sam's Club, Topco, Rite Aid, and Amazon, and major wholesalers, including McKesson, Amerisource Bergen, and Cardinal Health.

We seek to establish customer loyalty through superior customer service by providing a comprehensive assortment of high quality, value-priced products; timely processing, shipment and delivery of orders; assistance in managing customer inventories; and support in managing and building the customer's store brand business. The CSCA segment employs its own sales force to service larger customers and uses industry brokers for other customers. Field sales employees, with support from marketing and customer service, are assigned to specific customers in order to work most effectively with the customer. They assist customers by developing customized in-store marketing programs for customers' store brand products.

The primary objective of this store brand management approach is to enable our customers, retailers and wholesalers to increase sales and market share of their own store brand products by communicating store brand

quality and value to the consumer and by inviting comparison to national brand products. Our sales and marketing personnel assist customers in the development and introduction of new store brand products and in the promotion of customers' existing store brand products by providing market information; establishing individualized promotions and marketing programs, which may include floor displays, bonus sizes, coupons, rebates, store signs, and promotional packs; and performing consumer research. As e-commerce continues to grow as a consumer channel for our products, we have developed resources, programs and tools to be a strategic marketing partner for our customers' digital marketing efforts.

In contrast with national brand manufacturers, which incur considerable advertising and marketing expenditures targeted directly to the end user or consumer, the CSCA segment's store brand primary marketing efforts are channeled through retailers and wholesalers and reach the consumer through our customers' in-store marketing programs and our digital media programs. Because the retail profit margin for store brand products is generally higher than for national brand products, retailers and wholesalers often commit funds for additional promotions.

In addition to in-store marketing programs, our nutrition category markets directly to consumers and healthcare professionals.

Competition

The markets for our self-care products are highly competitive and differ for each product line and geographic region. Our primary competitors include manufacturers, such as Dr. Reddy's Labs, LNK International, Inc., PL Developments and Aurobindo, and brand-name pharmaceutical and consumer product companies, such as Johnson & Johnson, Procter & Gamble, Pfizer, Bayer AG, GSK, Abbott Nutrition, Philips, and Reckitt Benckiser. The various major categories of our CSCA business each have certain key competitors, such that a competitor generally does not compete across all product lines. However, some competitors do have larger sales volumes in certain of our categories. Additionally, national brand companies tend to have more resources committed to marketing their products and could in the future manufacture store brand versions of their products at lower prices than their national brand products. Competition is based on a variety of factors, including price, quality, assortment of products, customer service, marketing support, and approvals for new products (refer to [Item 1A. Risk Factors - Operational Risks](#) for additional information and risks associated with competition).

CONSUMER SELF-CARE INTERNATIONAL

Overview

The CSCI segment is comprised of our branded consumer self-care business primarily in Europe and Australia, and our consumer-focused business in the United Kingdom and parts of Asia. This segment also includes our United Kingdom liquid licensed products business. The CSCI segment develops, manufactures, markets, and distributes many well-known European consumer self-care brands in the upper respiratory, pain and sleep-aids, digestive health, vitamins, minerals and supplements, healthy lifestyle, skincare and personal hygiene, and oral self-care categories. The segment leverages its broad regulatory, sales, and distribution infrastructure to in-license and sell third-party brands and generic pharmaceutical products. The CSCI segment distributes these products through an extensive network of customers including pharmacies, wholesalers, drug and grocery store retailers, and parapharmacies in more than 30 countries, primarily in Europe. Many CSCI products have market leading positions in the markets in which they compete. During the year ended December 31, 2019, the CSCI segment represented approximately 29% of consolidated net sales.

Through continued investment in R&D partnerships and new technologies, the CSCI segment strives to offer high quality self-care products that meet consumers' needs. Internal R&D, new product development, insourcing, acquisitions, and partnerships support the new product pipeline, both in terms of brand extensions and product improvements. In the U.K., R&D focuses on oral liquid formulations for the branded Rx products for which liquid formulations are not available, as well as the development of store brand products and products for the branded business. Additional R&D centers are located in France, Sweden, Austria, Belgium, China, the U.K., Germany, and Hong Kong. In the rest of Europe, most R&D is performed by external partners with oversight by our teams. The segment has seven plants dedicated to manufacturing certain of its products.

The CSCI segment primarily focuses on building local and regional brands. In many markets outside of the U.S., a brand marketing strategy can be more effective than a store brand strategy due to the absence of mass merchandisers and large-scale pharmacy chains. Additionally, the inconsistent application of the centralized regulatory environment within Europe adds to the complexity of obtaining approvals for products in these markets.

While the CSCI segment sells over 200 brands, both on its own and through third parties, it focuses its resources on its "Focus brands", which are selected on the basis of their current sales and growth potential in the self-care market. Additional resources are allocated to these focus brands to strengthen their market position in high opportunity profit categories.

Recent Developments

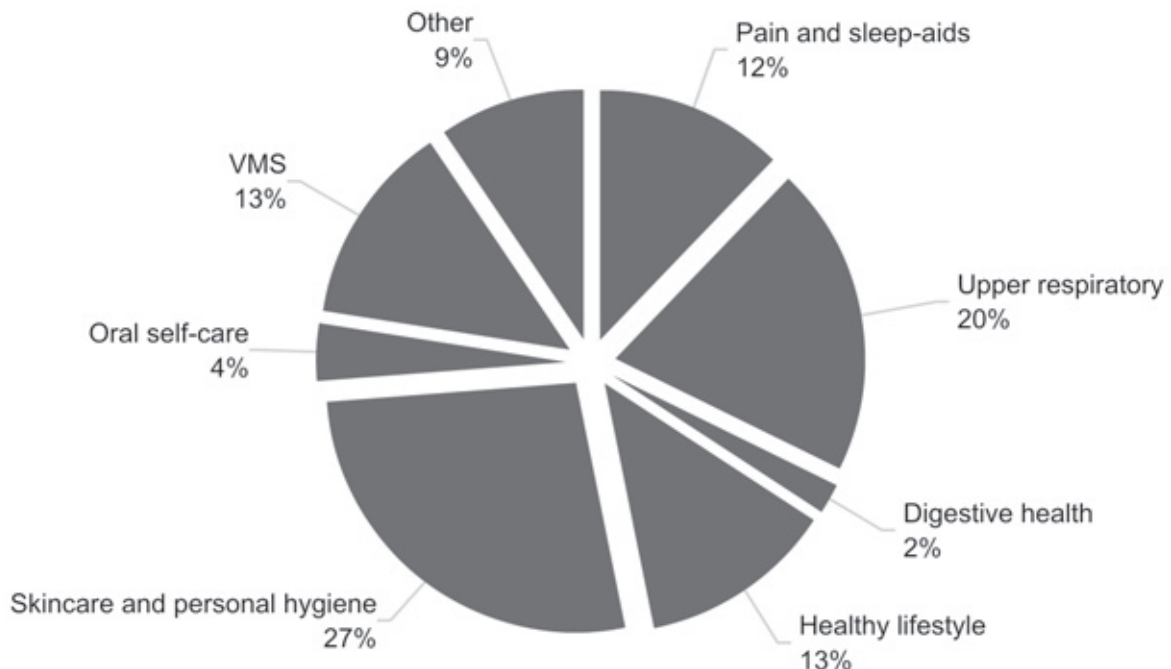
- During the three months ended December 31, 2019, following commercial launch delays relating to certain pain relief products that we licensed from a third party, the licensor determined that it would not extend the license agreement upon expiration. As a result, we recorded an asset impairment of \$9.7 million relating to this license, which we had reported as a definite-lived intangible asset (refer to [Item 8. Note 4](#) and [Note 7](#)).
- During the three months ended September 28, 2019, after worldwide regulatory bodies announced that Ranitidine may potentially contain NDMA, a known environmental contaminant, we promptly began testing our externally sourced Ranitidine API and Ranitidine-based products. On October 8, 2019, we halted shipments of the product based upon preliminary results. Based on the totality of data gathered, we made the decision to conduct a voluntary retail market withdrawal, which resulted in a decrease in net sales of \$1.8 million and a decrease in gross profit of \$2.9 million in our CSCI segment.
- On July 1, 2019, we acquired Ranir, a privately-held leading global supplier of private label and branded oral self-care products, for \$747.7 million. This transaction advances our transformation to a consumer-focused, self-care company while enhancing our position as a global leader in consumer self-care solutions. Ranir's non-U.S. operations are located primarily in the United Kingdom, France, Germany, and China (refer to [Item 8. Note 3](#)).

Products

As we continue to transform to a consumer-focused, self-care company, we re-aligned our product categories as of December 31, 2019. The re-alignment standardizes our categories and product level detail to provide consistency across our consumer segments. This transformative step will optimize the way in which management reports and evaluates our business. Our CSCI segment offers products and focus brands in the following categories:

Product Category	Description	Focus Brands
Pain and sleep-aids	Products comprised of pain relievers, fever reducers and sleep-aids.	Solpadeine® Nytol®
Upper respiratory	Products that relieve upper respiratory symptoms, including cough suppressants, expectorants, and sinus relief.	Bittner® Bronchenolo®/Bronchostop® Physiomer® Phytosun® Coldrex® Prevalin®/Beconase®
Digestive health	Products such as antacids, anti-diarrheal, and anti-heartburn that relieve symptoms associated with digestive issues.	
Healthy lifestyle	Products that help consumers live a healthy lifestyle such as smoking cessation, weight management, diabetes care, and well-being products.	Niquitin® XLS (Medical)® Yokebe®
Skincare and personal hygiene	Products for the face and body such as dermatological care, sun protection, scar management, lice treatment, insect repellents, and other products for various skin conditions.	ACO® Biodermal® Canoderm® Dermalex® Lactacyd® Wartner® Jungle Formula® Paranix® Pencivir®
Oral self-care	Products used for oral care, including toothbrushes, toothbrush replacement heads, floss, flossers, and whitening products.	Plackers®
Vitamins, minerals and supplements ("VMS")	Vitamins, minerals, and supplements.	Abtei® Arterin® Davitamon® Granufink®
Other	Diagnostic products and other miscellaneous self-care products.	

The chart below reflects net sales by product category in the CSCI segment for the year ended December 31, 2019.



We launched a number of new CSCI products in the year ended December 31, 2019, most notably XLS-Medical Forte 5, Phytosun[®] Aroms Organic essential oils, and ACO[®] brands in the healthy lifestyle, upper respiratory, and skincare and personal hygiene categories, respectively. During the year ended December 31, 2019, new product sales in the CSCI segment were \$108.0 million.

The CSCI segment has more than 150 strategic new products across all product categories in development, with each of its Focus brands having a five-year innovation master plan.

Sales and Marketing

Our products, including products from the Ranir acquisition, are sold to customers including pharmacies, drug stores, and grocery stores located primarily in Europe, such as Walgreens Boots Alliance, McKesson, AS Watson, Tesco, ASDA-Walmart, DM, and Carrefour. The CSCI segment sells its products primarily through an established pharmacy sales force to an extensive network of individual pharmacists. Our sales representatives visit pharmacists frequently, ensuring strong in-store visibility of our brands and facilitating pharmacist education programs. Our sales, marketing, and regulatory teams use training/merchandising teams who work in conjunction with local sales representatives to improve our brands' presence and recognition. We seek to attract key talent from leading OTC, Fast Moving Consumer Goods ("FMCG"), and retailer companies to build strong local teams throughout the countries in which the CSCI segment operates.

While CSCI products have a higher average gross margin than products sold in the CSCA segment, selling expenses are significantly higher due to the sales force mentioned above, as well as broadcast advertising and point-of-sale promotional spending to enhance brand equity. Key marketing communication tools for the CSCI segment include television and digital commercials, consumer leaflets, product websites, and targeted promotional campaigns.

Competition

The competitive landscape of the European consumer products market, in the categories in which we compete, is highly fragmented, as local companies often hold leadership positions in individual product segments in particular countries. As a result, the relevant competition in each of the CSCI segment's markets is both local and global. Competitors include GSK, Sanofi, Bayer, Johnson & Johnson, Reckitt Benckiser, Teva, Mylan, Stada, Novartis, Zentiva, and Procter & Gamble, as well as additional regional competitors. We believe our key advantage lies in our unique combination of best practices in sales, marketing, and product development (refer to [Item 1A. Risk Factors - Operational Risks](#) for additional information and risks associated with competition).

PRESCRIPTION PHARMACEUTICALS

Overview

The RX segment develops, manufactures, and markets a portfolio of generic prescription drugs primarily for sale in the U.S. We define this portfolio as predominantly "extended topicals", as it encompasses a broad array of dosage forms such as creams, ointments, lotions, gels, shampoos, foams, suppositories, sprays, liquids, suspensions, and solutions. The portfolio also includes select controlled substances, injectables, hormones, oral solid dosage forms, and oral liquid formulations. During the year ended December 31, 2019, the RX segment represented approximately 20% of consolidated net sales.

In addition to extended topical products, which are the focus of our development efforts, our current development areas include other delivery systems such as oral liquids, metered dose inhalers, injectables, and transdermal products, some of which we are developing with third parties. Our other areas of expertise include our production capabilities for controlled substances and hormonal products. Our R&D efforts focus on complex formulations, many of which require costly or complex clinical trials.

We manufacture our topical and oral products in the U.S. and Israel, and also source from various FDA-approved third parties. RX products are manufactured, labeled, and packaged in facilities that comply with strict FDA regulatory standards.

We actively collaborate with other pharmaceutical companies to develop, manufacture, and market certain products or groups of products. These types of collaboration agreements are common in the pharmaceutical industry. We may choose to enter into these types of agreements to, among other things, leverage our or our collaborators' R&D and manufacturing expertise, or utilize our extensive marketing and distribution resources (refer to [Item 8. Note 2](#) for more information regarding our method for recognizing revenue and expenses related to collaboration agreements, as well as [Item 8. Note 18](#) for more information regarding our collaboration agreements).

Recent Trends and Developments

- Although pricing pressure is showing some signs of moderation, during 2019 we continued to experience a significant year-over-year reduction in pricing in our RX segment due to competitive pressure. We expect softness in pricing to continue to impact the segment for the foreseeable future.
- On February 24, 2020, along with our partner Catalent Pharma Solutions, we received approval from the FDA on our abbreviated new drug application for generic albuterol sulfate inhalation aerosol, the first AB-rated generic version of ProAir[®] HFA. Shortly after approval, we launched with limited commercial quantities and anticipate that we will be in a position to provide a steady supply of this product by the fourth quarter of 2020.
- During the three months ended December 31, 2019, we tested our RX U.S. reporting unit for impairment. The impairment indicators related to a combination of industry and market factors that led to reduced projections of future cash flows. We determined the reporting unit was impaired and recorded an impairment charge of \$109.2 million (refer to [Item 8. Note 4](#) and [Note 7](#)).
- During the three months ended December 31, 2019, we identified impairment indicators on a definite-lived intangible asset related to our clindamycin and benzoyl peroxide topical gel (generic equivalent to Benzaclin[®]). Increases in competition caused price erosion that lowered our long-range revenue forecast, which indicated the asset was no longer recoverable and was partially impaired. We recorded an asset impairment of \$21.2 million (refer to [Item 8. Note 4](#) and [Note 7](#)).
- On July 2, 2019, we purchased the ANDA for a generic gel product for \$49.0 million in cash, which we capitalized as a developed product technology intangible asset. We launched the product during the third quarter of 2019 (refer to [Item 8. Note 3](#)).
- During the three months ended September 28, 2019, we identified impairment indicators related to our Evamist[®] branded product, which is a definite-lived intangible asset. The indicators related to a decline in sales volume and a corresponding reduction in our long-range revenue forecast. We recorded an asset impairment of \$10.8 million (refer to [Item 8. Note 4](#) and [Note 7](#)).
- On May 17, 2019, we purchased the ANDA for a generic product used to relieve pain for \$15.7 million in cash, which we capitalized as a developed product technology intangible asset. We launched the product during the third quarter of 2019 (refer to [Item 8. Note 3](#)).
- During the three months ended June 29, 2019, we identified impairment indicators for a certain definite-lived asset related to changes in pricing and competition in the market, which lowered the projected cash flows we expect to generate from the asset. We recorded an asset impairment of \$27.8 million (refer to [Item 8. Note 4](#) and [Note 7](#)).

Products

Listed below are some of the generic prescription products, including authorized generic products, that we manufacture and/or distribute:

Generic Name ⁽¹⁾	Comparative Brand-Name Drug
Acyclovir cream	Zovirax [®]
Alogliptin tabs	Nesina [®]
Bacitracin ophthalmic ointment	N/A
Betamethasone calcipotriene ointment	Taclonex [®]
Clindamycin phosphate topical	Cleocin T [®]
Erythromycin ophthalmic ointment	N/A
Hydrocortisone pramoxine cream	Pramosone [®]
Ketoconazole shampoo	Nizoral [®]
Mesalamine rectal	Rowasa [®]
Permethrin cream	Elimite [®]
Tacrolimus	Protopic [®]
Testosterone 1.62% gel	AndroGel [®]
Testosterone cypionate injection	Depo [®] , Testosterone
Tretinoin cream and gel	Retin-A [®]
Triamcinolone cream/ointment	Triderm [™] /Kenalog [™]

(1) Contains the same active ingredients present in the same dosage form as the comparable brand-name drug

We launched a number of new RX products in the year ended December 31, 2019, most notably Acyclovir cream (generic equivalent to Zovirax[®] cream), Diclofenac Gel 1% (generic equivalent to Voltaren[®] Gel), Metronidazole Gel 0.75% (generic equivalent to MetroGel-Vaginal[®]), and relaunched the Scopolamine Patch. During the year ended December 31, 2019, new product sales in the RX segment were \$86.3 million.

During the year ended December 31, 2019, we, on our own or in collaboration with partners, received final approval from FDA health authorities for seven Rx drug applications, and as of December 31, 2019, we had 26 Rx drug applications pending approval.

Sales and Marketing

Our customers include sourcing groups such as Red Oak, WBAD and ClarusONE, major wholesalers, national and regional retail drug, supermarket and mass merchandise chains, hospitals, and pharmacies.

Competition

The market for RX products is subject to intense competition from other generic drug manufacturers, brand-name pharmaceutical companies launching their own generic version of their branded products (known as an authorized generic), manufacturers of branded drug products that continue to produce those products after patent expirations, and manufacturers of therapeutically similar drugs. Among our generic drug manufacturer competitors are Sandoz Inc., Taro Pharmaceuticals, Mylan, Teva Pharmaceutical Industries Ltd., Glenmark Generics Inc., Akorn, and Lupin.

We believe that one of our primary competitive advantages is our ability to introduce difficult to develop and/or manufacture topical generic versions to brand-name drug products. Generally, these products are exposed to less competition due to the more complex and expensive development, clinical trial, and approval processes. In addition, we believe we have a favorable competitive position due primarily to our efficient distribution systems, topical production economies of scale, customer service, and overall reputation for high quality products (refer to [Item 1A. Risk Factors - Operational Risks](#) for more information and risks associated with competition).

INFORMATION APPLICABLE TO ALL REPORTABLE SEGMENTS

Trademarks, Patents and Licensing Agreements

While we own certain trademarks and patents, neither our business as a whole, nor any of our segments, is materially dependent upon our ownership of any one trademark, or patent, or group of trademarks or patents.

Materials Sourcing

Affordable, high-quality raw materials and packaging components are essential to all of our business units due to the nature of the products we manufacture. Raw materials and packaging components are generally available from multiple suppliers. Supplies of certain raw materials and product delivery systems may be more limited, as they are available from one or only a few suppliers and may require extensive compatibility testing before we can use them. We have been purchasing an increasing number of components and select finished goods rather than manufacturing them because of the availability of goods, economic reasons, temporary production limitations, FDA restrictions, sale of our API businesses, and other factors.

Historically, we have been able to react effectively, yet not always immediately, to situations that require alternate sourcing. Should such alternate sourcing be necessary, FDA requirements placed on products approved through the ANDA or NDA process could substantially lengthen the approval of an alternate source and adversely affect financial results. We believe we have good, cooperative working relationships with substantially all of our suppliers and have historically been able to capitalize on economies of scale in the purchase of materials and supplies due to our volume of purchases (refer to [Item 1A. Risk Factors - Operational Risks](#) for risks associated with materials sourcing).

Manufacturing and Distribution

Our primary manufacturing facilities are in the U.S. We also have manufacturing facilities in the U.K., Belgium, France, Germany, Austria, Israel, Mexico, China, and Australia, along with a joint venture in China (refer to [Item 1A. Risk Factors - Operational Risks](#) for risks associated with our manufacturing facilities). We supplement our production capabilities with the purchase of products from outside sources. The capacity of some facilities may be fully utilized at certain times for various reasons, such as customer demand, the seasonality of certain product categories, and new product launches. We may utilize available capacity by performing contract manufacturing for other companies. We have logistics facilities in the U.S., Israel, Mexico, Australia, and numerous locations throughout Europe. We use contract freight and common carriers to deliver our products.

Significant Customers

Our primary customer base aligns with the concentration of large drug retailers in the current global retail drug industry marketplace. Walmart is our largest customer and accounted for the following percentage of consolidated net sales:

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
13.0%	12.8%	13.0%

Sales to Walmart are primarily in the CSCA segment. In addition, while no other customer individually comprises more than 10% of net sales, we do have other significant customers. The next five largest customers represent 25% of net sales in 2019. The loss of several of these customers could be material. We believe we generally have good relationships with all our customers (refer to [Item 1A. Risk Factors - Operational Risks](#) for risks associated with customers).

Environmental

Our facilities and operations are subject to various environmental laws and regulations. We undergo periodic internal audits relating to environmental, health and safety requirements in order to maintain compliance with applicable laws and regulations in each of the jurisdictions in which we operate. We have made, and continue to make, expenditures necessary to comply with applicable environmental laws; however, we do not believe that the costs for complying with such laws and regulations have been or will be material to our business. We do not have any material remediation liabilities outstanding.

While we believe that climate change could present risks to our business, including increased operating costs due to additional regulatory requirements, physical risks to our facilities, water limitations, and disruptions to our supply chain, we do not believe these risks are material to our business in the near term.

Corporate Social Responsibility

We are committed to doing business in an ethical manner. We have a long history of environmentally sound and efficient operations, safe and healthy working conditions, and active participation in the communities where we are located. As reflected in our Corporate Social Responsibility ("CSR") Report available on our website, we remain committed to:

- Providing "Quality, Affordable Self-Care Products™";
- Environmental stewardship;
- Employee diversity, health and well-being;
- Community engagement; and
- Human rights.

GOVERNMENT REGULATION AND PRICING

The manufacturing, processing, formulation, packaging, labeling, testing, storing, distributing, advertising, and sale of our products are subject to regulation by a variety of agencies in the localities in which our products are sold. In addition, we manufacture and market certain of our products in accordance with standards set by various organizations. We believe that our policies, operations, and products comply in all material respects with existing regulations to which we are subject (refer to [Item 1A. Risk Factors - Operational Risks](#) for related risks).

United States Regulation

U.S. Food and Drug Administration

The FDA has jurisdiction over our Rx, OTC drug products, API, and Infant Formula. The FDA's jurisdiction extends to the manufacturing, testing, labeling, packaging, storage, distribution, and promotion of these products. We are committed to consistently providing our customers with high quality products that adhere to "current Good Manufacturing Practices" ("cGMP") regulations promulgated by the FDA.

OTC and Rx Pharmaceuticals

All facilities where Rx and OTC products are manufactured, tested, packaged, stored, or distributed for the U.S. market must comply with FDA cGMPs and regulations promulgated by competent authorities in the countries, states and localities where the facilities are located. All of our drug products are manufactured, tested, packaged, stored, and distributed according to cGMP regulations. The FDA performs periodic audits to ensure that our facilities remain in compliance with all appropriate regulations.

Many of our OTC products are regulated under the OTC monograph system and subject to certain FDA regulations. Under this system, selected OTC drugs are generally recognized as safe and effective and do not require the approval of an ANDA or NDA prior to marketing. Products marketed under the OTC monograph system must conform to specific quality, formula, and labeling requirements, including permitted indications, required warnings and precautions, allowable combinations of ingredients, and dosage levels. It is generally less costly to develop and bring to market a product regulated under the OTC monograph system.

We also market generic prescription drugs and non-prescription products that have switched from prescription to OTC status. Prior to commercial marketing, these products require approval by the FDA of an ANDA or NDA that provides information on chemistry, manufacturing controls, clinical safety, efficacy and/or bioequivalence, packaging, and labeling. While the development process for these drugs generally requires less time and expense than the development process of a new drug, the size and duration of required studies can vary greatly. Prior to the onset of the Generic Drug User Fee Amendments of 2012 ("GDUFA"), the FDA approval of generic drug applications took approximately three to five times longer than approval of innovator drugs. Pursuant to GDUFA II, beginning October 1, 2017, year five of the program, the FDA pledged to complete a first cycle review on 90% of electronic generic applications within 10 months of submission.

Under the Federal Food, Drug and Cosmetic Act, as amended ("FFDCA") (the Hatch-Waxman amendments), a company submitting an NDA can obtain a three-year period of marketing exclusivity for a prescription or OTC product if it performs a clinical study that is essential to FDA approval. Longer periods of exclusivity are possible for new chemical entities, orphan drugs (those designated under section 526 of the FFDCA) and drugs under the Generating Antibiotic Incentives Now Act. During this exclusivity period, the FDA cannot approve any ANDAs for a similar or equivalent generic product, which can preclude another party from marketing a similar product during this period. A company may obtain an additional six months of exclusivity if it conducts pediatric studies requested by the FDA on the product. This exclusivity can delay both the FDA approval and sales of certain products.

A company may be entitled to a 180-day generic exclusivity period for certain products. This exclusivity period often follows a patent certification and litigation process whereby the product innovator may sue for infringement. The legal action does not ordinarily result in material damages, but it generally triggers a statutorily mandated delay in FDA approval of the ANDA for a period of up to 30 months from when the innovator was notified of the patent challenge.

The Food and Drug Administration Safety and Innovation Act ("FDASIA") was signed into law on July 9, 2012. The law established, among other things, new user fee statutes for generic drugs and biosimilars, FDA authority concerning drug shortages, changes to enhance the FDA's inspection authority of the drug supply chain, and a limited extension of the 30-month stay provision described above. The FDASIA also reduced the time required for FDA responses to generic-blocking citizen petitions. We implemented new systems and processes to comply with the new facility self-identification and user fee requirements of the FDASIA, and we monitor facility self-identification and fee payment compliance to mitigate the risk of potential supply chain interruptions or delays in regulatory approval of new applications.

The U.S. government's Federal Drug Supply Chain Security Act ("DSCSA") requires development of an electronic pedigree to track and trace each prescription drug at the salable unit level through the distribution system, which will be effective incrementally over a 10-year period. The serialization of all Rx products distributed in the U.S. needed to be completed by November 26, 2018, with the requirement for tracking the products commencing on November 27, 2023. Requirements for the tracing of products at the lot level through the pharmaceutical distribution supply chain went into effect on January 1, 2015 for manufacturers, wholesale distributors, and re-packagers, and on July 1, 2015 for dispensers.

The FDA Reauthorization Act of 2017 created a pathway by which the FDA may, at the request of an applicant, designate a drug with "inadequate generic competition" as a Competitive Generic Therapy ("CGT"). At the request of the applicant, the FDA may expedite the development and review of an ANDA for a drug designated as a CGT. The first approved application for a drug with a CGT designation for which there are no unexpired patents or exclusivities listed in the Orange Book at the time of original submission of the ANDA may be eligible for 180 days of generic exclusivity.

Active Pharmaceutical Ingredients

Third parties develop and manufacture APIs for use in certain of our pharmaceutical products that are sold in the U.S. and other global markets. API manufacturers typically submit a drug master file to the regulatory authority that provides the proprietary information related to the manufacturing process. The FDA inspects the manufacturing facilities to assess cGMP compliance, and the facilities and procedures must be cGMP compliant

before API may be exported to the U.S.

Infant Formula

The FDA's Center for Food Safety and Applied Nutrition is responsible for the regulation of infant formula. The Office of Nutrition, Labeling and Dietary Supplements ("ONLDS") has labeling responsibility for infant formula, while the Office of Food Additive Safety ("OFAS") has program responsibility for food ingredients and packaging. The ONLDS evaluates whether an infant formula manufacturer has met the requirements under the FFDCa and consults with the OFAS regarding the safety of ingredients in infant formula and of packaging materials for infant formula.

All manufacturers of pediatric nutrition products must begin with safe food ingredients, which are either generally recognized as safe or approved as food additives. The Infant Formula Act provides specific requirements for infant formula to ensure the safety and nutrition of infant formulas, including minimum and, in some cases, maximum levels of specified nutrients.

Before marketing a particular infant formula, the manufacturer must provide regulatory agencies assurance of the nutritional quality of that particular formulation consistent with the FDA's labeling, nutrient content, and manufacturer quality control requirements. A manufacturer must notify the FDA at least 90 days before the marketing of any infant formula that differs fundamentally in processing or in composition from any previous formulation produced by the manufacturer. We actively monitor this process and make the appropriate adjustments to remain in compliance with recent FDA rules regarding cGMP, quality control procedures, quality factors, notification requirements, and reports and records for the production of infant formulas.

In addition, the FFDCa requires infant formula manufacturers to test product composition during production and shelf-life; to keep records on production, testing, and distribution of each batch of infant formula; to use cGMP and quality control procedures; and to maintain records of all complaints and adverse events, some of which may reveal the possible existence of a health hazard. The FDA conducts yearly inspections of all facilities that manufacture infant formula, inspects new facilities during early production runs, and collects and analyzes samples of infant formula. Our infant formula manufacturing facilities have been inspected by the FDA with no corrective actions required.

Our infant and toddler foods are subject to the Food Safety Modernization Act ("FSMA"), which protects the safety of U.S. foods by mandating comprehensive, prevention-based controls within the food industry. Under FSMA, the FDA has mandatory recall authority for all food products and greater authority to inspect food producers and is taking steps toward product tracing to enable more efficient product source identification in the event of a safety issue.

U.S. Department of Agriculture

The Organic Foods Production Act enacted under Title 21 of the 1990 Farm Bill established uniform national standards for the production and handling of foods labeled as "organic." Our infant formula manufacturing sites in Vermont and Ohio adhere to the standards of the U.S. Department of Agriculture ("USDA") National Organic Program for production, handling, and processing to maintain the integrity of organic products. Our infant formula manufacturing sites in Vermont and Ohio are USDA-certified, enabling them to produce and label organic products for U.S. and Canadian markets.

U.S. Environmental Protection Agency

The U.S. Environmental Protection Agency ("EPA") is the main regulatory body in the United States governing environmental regulation. Laws administered by the EPA, often in partnership with state agencies, include but are not limited to the Clean Air Act; the Clean Water Act; the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation and Liability Act; and the Federal Insecticide, Fungicide, and Rodenticide Act.

U.S. Drug Enforcement Administration

The U.S. Drug Enforcement Administration ("DEA") regulates certain drug products containing controlled substances, such as morphine, hydromorphone, opium, testosterone, midazolam, and List I chemicals, such as pseudoephedrine, pursuant to the federal Controlled Substances Act ("CSA"). The CSA and DEA regulations impose registration, security, record keeping, reporting, storage, manufacturing, distribution, importation and other requirements upon legitimate handlers under the oversight of the DEA. The DEA categorizes controlled substances into Schedules I, II, III, IV, or V, with varying qualifications for listing in each schedule. We are subject to the requirements regarding the controlled substances in Schedules II - V and the List I chemicals. Our facilities that manufacture, distribute, import, or export any controlled substances must register annually with the DEA.

The DEA inspects all manufacturing facilities to review security, record keeping, reporting, and handling prior to issuing a controlled substance registration, and it also periodically inspects facilities for compliance with the CSA and its regulations. Failure to maintain compliance with applicable requirements, particularly as manifested in the loss or diversion of controlled substances, can result in enforcement action, such as civil penalties, refusal to renew necessary registration, or the initiation of proceedings to revoke those registrations. In certain circumstances, violations could lead to criminal prosecution. We are also subject to state laws regulating the manufacture and distribution of certain products.

Federal Healthcare Programs and Drug Pricing Regulation

Within the U.S., government healthcare insurance and welfare programs such as the Medicare and Medicaid programs are important third party payers for patients who take our products. These programs include several indirect forms of price regulation applicable to our drug products as a condition for coverage and/or payment for our products and also regulate the amount that pharmacies and other healthcare providers will be paid for our products. Specifically, U.S. law requires that a pharmaceutical manufacturer, as a condition of having federal funds being made available for the manufacturer's drugs under Medicaid and Medicare Part B, enter into three government pricing program agreements: (i) a Medicaid rebate agreement with the Secretary of Health and Human Services ("HHS") to pay rebates to state Medicaid programs for the manufacturer's covered outpatient drugs that are dispensed to Medicaid beneficiaries and paid for by a state Medicaid program; (ii) a 340B program agreement with the Secretary of HHS to provide discounts to certain "covered entity" safety net healthcare providers; and (iii) a Master Agreement with the Department of Veterans Affairs (the "VA") under which discounts are available for purchases by federal agencies. We have such agreements in effect.

Medicaid Rebate Agreement

The Medicaid rebate agreement requires the drug manufacturer to remit rebates to each state Medicaid agency on a quarterly basis for both fee-for-service and Medicaid managed care organization utilization. Rebate amounts are based on pricing data reported by the manufacturer to the Centers for Medicare & Medicaid Services ("CMS"), including Average Manufacturer Price ("AMP") and, in the case of innovator products, Best Price ("BP"). U.S. law also requires that a company that participates in the Medicaid rebate program report average sales price ("ASP") information to CMS for each calendar quarter for certain categories of drugs that are paid under Part B of the Medicare program. CMS uses these submissions to determine payment rates for drugs under Medicare Part B.

Under the Medicaid rebate program, the minimum rebate amounts due are as follows: (i) for noninnovator products, in general generic drugs marketed under ANDAs, the rebate amount is 13% of the AMP for the quarter; and (ii) for innovator products, in general brand-name products marketed under NDAs, the rebate amount is the greater of 23.1% of the AMP for the quarter or the difference between such AMP and the BP for that same quarter. Manufacturers also pay an "additional rebate" on both innovator and noninnovator drugs where price increases since launch have outpaced inflation. Beginning with the first quarter of 2017, an additional rebate is due for noninnovator products, which is calculated somewhat differently from the innovator product additional rebate, but likewise generally applies where and to the extent that a manufacturer's AMP increases faster than the rate of inflation.

CMS issued a final regulation, generally effective April 1, 2016, to implement changes to the Medicaid rebate program under the 2010 health reform legislation ("Health Reform Law") and otherwise to provide program guidance. In addition to guidance concerning rebate program administration matters, the regulation also addressed

certain related Medicaid reimbursement matters. First, under the Health Reform Law, CMS has also begun to use manufacturer AMP data to calculate reimbursement limits for pharmacies for multiple source drugs under the Medicaid program, known as the federal upper limits ("FULs"). CMS also surveys and publishes retail community pharmacy acquisition cost information to provide state Medicaid agencies with a basis for comparing their own reimbursement and pricing methodologies and rates. Second, the regulation also directed states to update their Medicaid payment methodologies to provide for payment amounts designed to reflect pharmacies' "actual acquisition costs" for drugs, a change from the prior "estimated acquisition" standard. The regulation also required states to provide the government with findings to support their compliance with this standard by April 1, 2017.

Pricing and rebate calculations are governed by statutory and regulatory requirements that are complex, vary among products and programs, can change over time, and are subject to interpretation by us, governmental or regulatory agencies, and the courts. In the case of the Medicaid rebate program, if we become aware of errors in our prior price submissions, or a prior BP submission needs to be updated due to late arriving data, we must resubmit the updated data within specified time frames. Such restatements and recalculations increase our cost of compliance with the Medicaid rebate program, and corrections can result in an overage or underage of our rebate liability for past quarters, depending on the nature of the correction.

340B Program Agreement

The 340B drug pricing program requires participating manufacturers to agree to charge statutorily-defined covered entities no more than the 340B "ceiling price" for the manufacturer's covered outpatient drugs. The ceiling price is derived from the data the manufacturer reports under the Medicaid rebate program and therefore any changes to statutory or regulatory requirements applicable to the Medicaid price figures may impact the 340B ceiling price calculation as well. 340B covered entities include a variety of community health clinics and other entities that receive health services grants from the Public Health Service, as well as certain hospitals that serve a disproportionate share of low-income patients.

Master Agreement with the Department of Veterans Affairs

U.S. law also requires any company that participates in the Medicaid rebate program and Medicare Part B and that wants its covered drugs paid for by certain federal agencies and grantees to enter into a Master Agreement with the VA. Under the Master Agreement, the company must offer its prescription innovator drugs for procurement under the Federal Supply Schedule ("FSS") contracting program, and must charge certain agencies (the VA, Department of Defense, Public Health Service and Coast Guard) no more than a statutory Federal Ceiling Price ("FCP"). The FCP is calculated based on Non-Federal Average Manufacturer Price data we submit to the VA. FSS contracts include extensive disclosure and certification requirements and standard government terms and conditions with which we must comply. Products sold to the government under an FSS contract must comply with the requirements of the Trade Agreements regarding the allowable countries where a product is manufactured or "substantially transformed". Consistent with the VA's interpretation of the Master Agreement, we have also entered into an agreement to pay rebates on innovator drug prescriptions dispensed to TRICARE beneficiaries by TRICARE network retail pharmacies.

Medicare Part D "Coverage Gap" Rebates

For certain innovator products, manufacturers must also enter into an agreement with the Secretary of HHS to provide rebates with respect to utilization of their products by certain Medicare Part D beneficiaries while those patients are within the Medicare Part D benefit "coverage gap." Manufacturers are not required to submit separate pricing data under this program; the rebate amount is calculated by CMS based on Part D plans' "negotiated prices" paid to pharmacies.

Other Price Regulation and State Regulation

In addition to these technical government pricing regulation programs, drug pricing has come under increasing public scrutiny arising out of general concerns about high drug costs or price increases, and transparency of pricing and discounting practices within the pharmaceutical distribution system. Congress is considering various amendments to federal drug pricing laws, as well as new forms of pricing regulation. Several states have enacted laws that, among other things, require manufacturers to report information concerning

pharmaceutical pricing or marketing practices or to provide advance notice of price actions or applications for regulatory approvals to certain entities (refer to [Item 1A. Risk Factors - Operational Risks](#) for risks related to the above-mentioned programs).

Other U.S. Regulations and Organizations

We are subject to various other federal, state, non-governmental, and local agency rules and regulations. Compliance with the laws and regulations regarding the manufacture and sale of our current products and the discovery, development, and introduction of new products requires substantial effort, expense and capital investment. Other regulatory agencies, organizations, legislation, regulations and laws that may impact our business include, but are not limited to:

- *Physician Payment Sunshine Act and Similar State Laws* - This act and similar state laws require certain pharmaceutical manufacturers to engage in extensive tracking of payments or transfers of value to physicians and teaching hospitals, maintenance of a payment database and public reporting of the payment data.
- *Foreign Corrupt Practices Act of 1977 ("FCPA")* - This act and other similar anti-bribery laws prohibit companies and their intermediaries from providing money or anything of value to officials of foreign governments, foreign political parties or international organizations with the intent to obtain or retain business or seek a business advantage.
- *Federal Trade Commission ("FTC")* - This agency oversees the advertising and other promotional practices of consumer products marketers. The FTC considers whether a product's claims are substantiated, truthful and not misleading. The FTC also reviews mergers and acquisitions of companies exceeding specified thresholds and investigates certain business practices relevant to the healthcare industry.
- *International Organization for Standardization ("ISO")* - The ISO Standards specify requirements for a Quality Management System that demonstrates the ability to consistently provide products that meet customer and applicable regulatory standards and includes processes to ensure continuous improvement. Our infant formula manufacturing sites are ISO 9001-2008 Certified for Quality Management Systems. ISO inspections are conducted at least annually.
- *United States Pharmacopeial Convention, Inc. ("USP")* - The USP is a non-governmental, standard-setting organization. By reference, the FDCA incorporates the USP quality and testing standards and monographs as the standard that must be met for the listed drugs, unless compliance with those standards is specifically disclaimed on the product's labeling. USP standards exist for most Rx and OTC pharmaceuticals and many nutritional supplements. The FDA typically requires USP compliance as part of cGMP compliance.
- *Health Insurance Portability and Accountability Act ("HIPAA")* - HIPAA is a set of regulations designed to protect personal information and data collected and stored in medical records. It established a national standard to be used in all doctors' offices, hospitals and other businesses where personal medical information is stored. In addition to protecting personal medical information, HIPAA also gives patients the right to view their medical records and request changes if the data is incorrect. We could be subject to criminal penalties if we knowingly obtain individually identifiable health information from a covered entity in a manner that is not authorized or permitted by HIPAA or for aiding and abetting the violation of HIPAA.
- *Consumer Product Safety Commission ("CPSC")* - The CPSC has published regulations requiring child resistant packaging on certain products including pharmaceuticals and dietary supplements. The manufacturer of any product that is subject to any CPSC rule, ban, standard or regulation must certify that, based on a reasonable testing program, the product complies with CPSC requirements.
- *California Safe Drinking Water and Toxic Enforcement Act ("Prop 65")* - Prop 65 is a toxic right-to-know warnings law that allows the state attorney general and private enforcers to sue on behalf of the public claiming the products in question sold in California violate the law by exposing consumers to chemicals in levels above those allowed by regulation without carrying warnings.

- *Other State Agencies* - We are subject to regulation by numerous other state health departments, insurance departments, boards of pharmacy, state controlled substance agencies, state consumer health and safety regulations, and other comparable state agencies, each of which have license requirements and fees that vary by state.

Regulation Outside the U.S.

We develop and manufacture products and market third-party manufactured products in regions outside the U.S., including Europe, Israel, Canada, Mexico, Australia, countries in Asia, South America, and the Middle East, each of which has its own regulatory environment. The majority of our sales outside the U.S. are in the following categories: OTC/Rx pharmaceuticals, infant formulas, medical devices, dietary supplements, cosmetics, and oral self-care products. Other regulatory agencies, organizations and legislation that may impact our business include, but are not limited to:

- *Privacy Regulations* - We are subject to numerous global laws and regulations designed to protect personal data, such as the European Union General Data Protection Regulation ("GDPR"). The GDPR introduced more stringent data protection requirements in the EU, as well as substantial fines for breaches of the data protection rules. The GDPR increased our responsibility and potential liability in relation to personal data that we process, and we have put in place additional mechanisms to comply with the GDPR.
- *Transparency Laws* - In various jurisdictions in which we operate, we are subject to the laws and regulations aimed at increasing transparency of financial relationships between healthcare professionals and pharmaceutical/medical device manufacturers. These acts require certain pharmaceutical manufacturers to engage in extensive tracking of payments or transfers of value to healthcare professionals.
- *Anti-Bribery Laws* - Various jurisdictions in which we operate have laws and regulations, including the U.K. Bribery Act 2010 and the Irish Criminal Justice (Corruption Offenses) Act 2018, aimed at preventing and penalizing corrupt and anticompetitive behavior.
- *Rules and Regulations Infant Formula* - Outside of the U.S., country-specific regulations define the requirements that we must comply with regarding the manufacturing, testing, labeling, packaging, storage, distribution, and promotion of infant formula. We are subject to ongoing periodic inspection through these complex regulations, including by the FDA and other regulatory agencies such as the Canadian Food Inspection Agency ("CFIA").

European Union

OTC and Rx Pharmaceuticals

The European pharmaceutical industry is highly regulated and much of the legislative and regulatory framework is driven by the European Parliament and the European Commission. This has many benefits, including the potential to harmonize standards across the complex European market. However, obtaining regulatory agreement across member states presents complex challenges that can lead to delays in the regulatory process.

In the EU, as well as many other locations around the world, the manufacture and sale of medicinal products are regulated in a manner substantially similar to that of the U.S. requirements, which generally prohibit the handling, manufacture, marketing, and importation of any medicinal product unless it is properly registered in accordance with applicable law. The registration file relating to any particular product must contain data related to product efficacy and safety, including results of clinical testing and/or references to medical publications, as well as detailed information regarding production methods and quality control. Health ministries are authorized to cancel the registration of a product if it is found to be harmful or ineffective or if it is manufactured or marketed other than in accordance with registration conditions.

Between 1995 and 1998, the over-arching regulation that governs medicinal products was revised in an attempt to simplify and harmonize product registration. This revised legislation introduced the mutual recognition procedure ("MRP"), whereby after approval of a marketing authorization by regulatory authorities in the reference

member state (“RMS”), additional marketing authorizations could be submitted to other concerned member states to obtain a product license. In November 2005, the medicinal product legislation was further revised to introduce the decentralized procedure (“DCP”), whereby marketing authorizations are submitted simultaneously to the RMS and select concerned member states. In 2005, the EMA also opened up the centralized procedure to sponsors of marketing authorizations for generic medicinal products. Unlike the MRP and DCP, the centralized procedure results in a single marketing authorization and product labeling across all member states that will allow a sponsor to file for individual country reimbursement and make the medicine available in all the EU countries listed on the application. Marketing authorizations and subsequent product licenses are granted to applicants only after the relevant health authority issues a positive assessment of quality, safety and efficacy of the product.

In addition to obtaining marketing authorization for each product, all member states require that a manufacturer’s facilities obtain approval from an EU Regulatory Authority. The EU has a code of GMP that each manufacturer must follow and comply with. Regulatory authorities in the EU may conduct inspections of the manufacturing facilities to review procedures, operating systems and personnel qualifications. We believe that our policies, operations and products comply in all material respects with existing regulations to which our operations are subject.

In 2011, it was first proposed that the EU Member States had to transition to the European Falsified Medicines Directive (the “Directive”). The Directive was subsequently written into national law on January 2, 2013. The Directive made reference to a Delegated Act (the Delegated Act lists the detailed requirements for manufacturers). The Delegated Act was finalized and published in February 2017, and it provided for a two-year implementation period. As of February 2019, we are in compliance with the Delegated Act. The provisions of the Directive are intended to reduce the risk of counterfeit medicines entering the supply chain and also to ensure the quality of API manufactured outside of the EU. The Directive required the serialization of all Rx and some OTC products, similar to the DSCSA in the U.S.

In the EU, member states regulate the pricing of prescription medicinal products, and in some cases, the formulation and dosing of products. This regulation is handled by individual member state national health services. These individual regulatory bodies can result in considerable price differences and product availability among member states. The implementation of tendering systems for the pricing of pharmaceuticals in several countries generally impacts drug pricing for generics; generally, “tendering” refers to a system that requires bids to be submitted to the government by competing manufacturers to be the exclusive, or one of a few, suppliers of a product in a particular country.

Data exclusivity provisions exist in many countries, although the application is not uniform. In general, these exclusivity provisions prevent the approval and/or submission of generic drug applications to the health authorities for a fixed period of time following the first approval of the brand-name product in that country. As these exclusivity provisions operate independently of patent exclusivity, they may prevent the submission of generic drug applications for some products even after the patent protection has expired.

The requirements deriving from European pharmacovigilance regulation are constantly expanding due to increasing guidance on good vigilance practices and increased communication on inspectors’ expectations. Pharmacovigilance fee regulation became effective in late 2014 to support health authority assessment of pharmacovigilance safety evaluation reports, study protocols for post authorization safety studies and referrals. Once approved, the advertising of pharmaceuticals in the EU is governed by national regulations and guidelines. Within certain member states this is overseen by a self-certification process whereas in others national governance bodies approve material prior to release.

The wholesale distribution of medicinal products is an important activity in the integrated supply chain management. The quality and the integrity of medicinal products can be affected by a lack of adequate control. To this end, the EU Commission has published guidelines on Good Distribution Practice of Medicinal Products for Human Use in 2013. The present guidelines are based on Articles 84 and 85b(3) of medicinal products for human use directive.

Medical Devices

The EU has enacted into law numerous directives and adopted many harmonizing standards pertaining to a wide range of industrial products, including medical devices. Medical devices that comply with the requirements of

applicable directives are entitled to bear the CE marking of conformity, which indicates that the device conforms to the applicable requirements of the directives and, accordingly, can be commercially distributed throughout Europe. The method of assessing conformity varies depending on the class of the product, but normally involves a combination of self-assessment by the manufacturer and a third-party assessment by a Notified Body, an organization accredited by a member state. Assessment by a Notified Body includes an audit of the manufacturer's quality system and may also include specific testing of the product. This assessment is a prerequisite for a manufacturer to commercially distribute the product throughout the EU. On May 25, 2017, the EU's Medical Device Regulation (the "MDR") became effective, with a three year transitional period until full application. All Class I (low risk) medical devices need to comply with the MDR by May 26, 2020, and all medical devices sold in the EU will need to be approved under the MDR by May 26, 2024. Notified Bodies, which are organizations accredited by a member state, can continue to approve medical devices under the existing Medical Device Directives (the "MDDs") until May 26, 2020. Beginning on May 27, 2020, Notified Bodies will no longer be able to approve new medical devices under the MDDs or approve notifications of "substantial" design changes, including changes to labeling/ packaging, changes to the manufacturing process, or the addition of new features and functionality, to medical devices that were approved under the MDDs.

Dietary Supplements

Dietary supplements are subject to several regulations that inform the selection of ingredient levels and how products can be described on packaging and in advertising. These regulations include: Food Supplements Directive 2002/46/EC, Food Information to Consumers Regulation (EU) No 1169/2011, Permitted Vitamins and Minerals Regulation (EC) 1170/2009, Food Additives Regulation (EC) 1333/2008, Nutritional & Health Claims Regulation (EC) No 1924/2006, the Foods Intended for Particular Nutritional Uses Directive 2009/39/EC, and Regulation (EU) 609/2013.

EU rules on nutrition and health claims, which were established by Regulation EC 1924/2006, apply to any nutritional or health claim by a manufacturer. The objective of the regulation is to ensure that claims made in food labeling or advertising are clear, accurate and based on scientific evidence. The European Food Safety Authority, an advisory panel to the European Commission, performs all scientific assessments of health claims on food and supplement labels. An EU register of nutrition and health claims exists to document approved, pending, and rejected claims.

Cosmetics

Cosmetic products in the EU market must comply with Regulation EC No. 1223/2009. This regulation requires manufacturers to prepare a product safety report prior to placing a cosmetic product in the market. In addition, for each cosmetic product placed in the market, a "responsible person" must be designated to oversee compliance with the regulation's reporting requirements. Commission Regulation EU No. 655/2013 establishes the common criteria and justification for claims to be used in the packaging and advertising of cosmetics products.

General Product Safety Directive

The General Product Safety Directive (2001/95/EC) complements sector-specific legislation such as rules that apply to electrical and electronic goods, chemicals, and other specific product groups. Together, the General Product Safety Directive and sector specific legislation ensure the safety and traceability of products in the market (other than pharmaceuticals, medical devices, and food which are regulated under separate legislation). If our products fail to meet the General Product Safety Directive, we may incur fines.

Employees

As of December 31, 2019, we had approximately 11,200 full-time and temporary employees worldwide, of which approximately 18% were covered by collective bargaining agreements. We consider our employee relations generally good.

Available Information

Our principal executive offices are located at The Sharp Building, Hogan Place, Dublin 2, D02 TY74, and our North American base of operations is located at 515 Eastern Avenue, Allegan, Michigan 49010. Our telephone number is +353 1 7094000. Our website address is www.perrigo.com, where we make available free of charge our reports on Forms 10-K, 10-Q and 8-K, including any amendments to these reports, as soon as reasonably practicable after they are electronically filed with or furnished to the U.S. Securities and Exchange Commission ("SEC"). These filings are also available to the public at www.sec.gov and www.isa.gov.il.

ITEM 1A. RISK FACTORS

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Operational Risks

We face vigorous competition from other pharmaceutical and consumer packaged goods companies that may threaten the commercial acceptance and pricing of our products.

We operate in a highly competitive environment. Our products compete against store brand, generic, and branded health and wellness products. Competition is also impacted by changes in regulations and government pricing programs that may give competitors an advantage. If we are unable to compete successfully, our business will be harmed through loss of customers or increased negative pricing pressure that would adversely affect our ability to generate revenue and adversely affect our operating results.

- As a manufacturer of generic versions of brand-name drugs through our CSCA and RX segments, we experience competition from brand-name drug companies that may try to prevent, discourage or delay the use of generic versions through various measures, including introduction of new branded products, legislative initiatives, changing dosage forms or dosing regimens, regulatory processes, filing new patents or patent extensions, lawsuits, citizens' petitions, and negative publicity prior to introduction of a generic product. In addition, brand-name competitors may lower their prices to compete with generic products, increase advertising, or launch, either through an affiliate or licensing arrangements with another company, an authorized generic at or near the time the first generic product is launched, depriving the generic product of potential market exclusivity.
- Our CSCA and RX segments may experience increased price competition as other generic companies produce the same product, sometimes for dramatically lower margins in order to gain market share. Other companies may introduce new drugs and/or drug delivery techniques that make our current products less desirable. A drug may be subject to competition from alternative therapies during the period of patent protection or regulatory exclusivity, and thereafter, we may be subject to further competition from generic products and OTC pharmaceuticals or biosimilars.
- We develop and distribute branded products through our CSCA and CSCI segments. We experience competition from other brand-name companies, many of which are larger and have more resources to devote to advertising and marketing. These direct competitors may be able to adapt more quickly to changes in customer requirements. Our current and future competitors may develop products comparable or superior to those offered by us at more competitive prices.
- Our CSCA and RX segments also experience competition from generic drug manufacturers, some of whom are significantly larger than we are, who may develop their products more rapidly or complete regulatory approval processes sooner, or may market their products earlier than we do.

If we do not continue to develop, manufacture, and market innovative products, introduce new line extensions, or expand into adjacent categories that meet customer demands, we may lose market share and our net sales may be negatively impacted.

Our continued growth is due in large part to our ability to develop, manufacture, and market products that meet customer requirements for quality, safety, efficacy, and cost effectiveness. Continuous introductions of new products and product categories are critical to our business. If we do not continue to develop, manufacture, and market new products, we could lose market share, and our net sales may be negatively impacted.

- We maintain a diversified product line to function as a primary supplier for our customers. Capital investments are driven by growth, technological advancements, cost improvement and the need for manufacturing flexibility. Our future capital expenditures could vary materially due to the uncertainty of these factors. In addition, if we fail to stay current with the latest manufacturing, information and packaging technology, we may be unable to competitively support the launch of new product introductions.
- Our product margins may decline over time due to our products' aging life cycles, changes in consumer choice, changes in competition for our existing products, or the introduction of next generation innovative products; therefore, new product introductions are necessary to maintain our current financial condition. If we are unable to continue to create new products, we may lose market share or experience pricing pressure, and our net sales may be negatively impacted.
- We must prove that the regulated generic drug products in our CSCA and RX segments are bioequivalent to their branded counterparts, which may require bioequivalence studies, and in the case of topical products, even more extensive clinical endpoint trials to demonstrate their efficacy. The development and commercialization process, particularly with respect to innovative products, is both time consuming and costly, and subject to a high degree of business risk. Products currently under development may require re-design to meet evolving FDA standards, may not perform as expected, may not pass required bioequivalence studies, or may be the subject of intellectual property challenges. Necessary regulatory approvals may not be obtained in a timely manner, if at all. Any of these events may negatively impact our net sales.
- Even if we are successful in developing a product, our customers' failure to launch one of our products successfully, or delays in manufacturing developed products, could adversely affect our operating results. In addition, the FDA or similar regulatory agency could impose higher standards and additional requirements, such as requiring more supporting data and clinical data than previously required, in order to gain regulatory clearance to launch new formulations into the market, which could negatively impact our future net sales.

Our CSCA and CSCI segments are impacted by changes in consumer preferences. If we are unable to adapt to these changes, we may lose market share and our net sales may be negatively impacted.

Consumer preferences related to health and nutritional concerns may change, which could negatively impact demand for our CSCA and CSCI products or cause us to incur additional costs to change our products or product packaging.

- The future growth and stability of U.S. store brand market share can be impacted, in part, by general economic conditions, which can influence consumers to switch to and from store brand products. Our CSCA segment sales could be negatively affected if economic conditions improve and consumers return to purchasing higher-priced brand-name products. Conversely, while store brand products present an alternative to higher-priced branded products, if economic conditions deteriorate, our CSCA segment sales could be negatively impacted if consumers forgo obtaining healthcare or reduce their healthcare spending.
- Our CSCI segment's success is dependent on the continued growth in demand for its healthy lifestyle products, which includes products for weight management and well-being and smoking cessation. If demand for products in this category decreases, our CSCI segment's results of operations would be negatively impacted.
- Our CSCA customers may request changes in packaging to meet consumer demands, which could cause us to incur inventory obsolescence charges and redesign costs, which in turn would negatively impact our CSCA segment's results of operations.

- Our nutritional product category within our CSCA segment is subject to changing consumer preferences and health and nutrition-related concerns. Our business depends, in part, on consumer preferences and choices, including the number of mothers who choose to use infant formula products rather than breastfeed their babies. To the extent that private, public, and government sources may promote the benefits of breastfeeding over the use of infant formula, there could be a reduced demand for infant formula products. We could also be adversely impacted by an increase in the number of families that are provided with infant formula by the U.S. federal government through the Women, Infants and Children program, as we do not participate in this program.

We operate in highly regulated industries, and any inability to timely meet current or future regulatory requirements could have a material adverse effect on our business, financial position, and operating results.

We are subject to the regulations of a variety of U.S. and non-U.S. agencies related to the manufacturing, processing, formulation, packaging, labeling, testing, storing, distribution, advertising, and sale of our products as described in detail in [Item 1. Business - Government Regulation and Pricing](#). Changes in existing regulations or the adoption of new regulations in the countries in which we operate could impose restrictions or delays on our ability to manufacture, distribute, sell or market our products, may be difficult or expensive for us to comply with, and may adversely affect our revenue, results of operations, and financial condition. Below are some of the ways in which government regulation could impact our business and/or financial results:

- We must obtain approval from the appropriate regulatory agencies in order to manufacture and sell our products in the regions in which we operate. Obtaining this approval can be time consuming and costly. There can be no assurance that, in the event we submit an application for a marketing authorization to any global regulatory agency, we will obtain the approval to market a product and/or that we will obtain it on a timely basis. Laws unique to the U.S. regulatory framework encourage generic competition by providing eligibility for first generic marketing exclusivity if certain conditions are met. If we are granted generic exclusivity, the exclusivity may be shared with other generic companies, including authorized generics; or it is possible that we may forfeit 180-day exclusivity if we do not obtain regulatory approval or begin marketing the product within the statutory requirements. Finally, if we are not the first to file our ANDA, the FDA may grant 180-day exclusivity to another company, thereby effectively delaying the launch of our product and/or possibly reducing our market share.
- Global regulatory agencies regularly inspect our manufacturing facilities and the facilities of our third-party suppliers. The failure of one of our facilities, or a facility of one of our third-party suppliers, to comply with applicable laws and regulations may lead to a breach of representations made to our customers, or to regulatory or government action against us related to the products made in that facility. Such action could include suspension of or delay in regulatory approvals. If the compliance violations are severe, agencies of the government may initiate product seizure, injunction, recall, suspension of production or distribution of our products, loss of certain licenses or other governmental penalties, or civil or criminal prosecution, thereby impacting the reputation of all of our products.
- In the U.S., the DSCSA requires development of an electronic pedigree to track and trace each prescription drug at the salable unit level through the distribution system, which is being implemented incrementally over a 10-year period beginning on January 1, 2015, for manufacturers, wholesale distributors, and re-packagers, and on July 1, 2015 for dispensers. Compliance with the U.S. electronic pedigree requirements has and will continue to increase our operational expenses and impose significant administrative burdens.
- The European Commission passed legislation requiring new product packaging 'safety features' to prevent falsification of medicinal products primarily within the prescription medicines sector. All marketing authorization holders in the EU member states and EEA members Norway, Iceland, Liechtenstein and Switzerland were required to introduce the necessary changes by February 9, 2019 (or risk forfeiting their product licenses). However, manufacturers based out of Greece, Belgium and Italy have an extended timeline until February 9, 2025 to implement the serialization guidelines as they already feature similar requirements on their current drug packages. Compliance with the EU electronic pedigree requirements has and will continue to increase our operational expenses and impose significant administrative burdens.
- Global regulatory agencies highly scrutinize any product application submitted to switch a product from physician prescribed Rx to unsupervised OTC use by the general public. The expansion of Rx-to-OTC

switches is critical to our future growth. Reluctance of regulatory agencies to approve Rx-to-OTC switches in new product categories could impact that growth. Further, regulatory agencies can reassess the terms of OTC classification if they perceive a shift in the previously assessed benefit/risk profile. Any such reassessment may lead to OTC products reverting to prescription.

- Our infant formula products may be subject to barriers or sanctions imposed by countries or international organizations limiting international trade and dictating the specific content of infant formula products. Governments could enhance regulations on the industry aimed at ensuring the safety and quality of dairy products, including but not limited to, compulsory batch-by-batch inspection and testing for additional safety and quality issues. Such inspections and testing may increase our operating costs related to infant formula products.
- If we are unable to successfully obtain the necessary quota for controlled substances and List I chemicals, we risk having delayed product launches or failing to meet commercial supply obligations. If we are unable to comply with regulatory requirements for controlled substances and List I chemicals, the DEA, or similar regulatory agency, may take regulatory actions, resulting in temporary or permanent interruption of distribution of our products, withdrawal of our products from the market, or other penalties.
- In order to commercially distribute our medical device products in the EU, they need to conform with the requirements of applicable EU directives. The method of assessing conformity varies depending on the class of the product, but normally involves a combination of self-assessment by the manufacturer and a third-party assessment by a notified body, an organization accredited by a member state, which includes an audit of the manufacturer's quality system and, for some products, specific product testing. If our products fail to meet the applicable EU directives, then we may not meet our projected growth targets and/or incur fines and penalties.
- Complying with the legislative framework for cosmetics and food supplements in the EU remains challenging as a result of changing EU regulations, diverging national regulations from EU regulations, and diverging regulations between EU member states. If our products fail to meet the applicable EU and/or national regulations, then we may not meet our projected growth targets and/or incur fines and penalties.
- Beginning on May 26, 2024, all medical devices sold in the EU will need to be approved under the MDR. Only notified bodies that have been designated under the MDR can carry out conformity assessment procedures, and only for certain types of devices listed by the product codes in their designation. This designation process is a lengthy and costly process, resulting in a shortage of certified notified bodies. If we fail to secure a notified body certified under MDR, this will impact our ability to keep our medical devices in the EU market. Without required approval for our medical devices under MDR, we are not permitted to sell such medical devices in the EU.
- Our operations extend to numerous countries outside the U.S. and are subject to the risks inherent in conducting business globally and under the laws, regulations, and customs of various jurisdictions. These risks include compliance with a variety of national and local laws of countries in which we do business, such as restrictions on the import and export of certain intermediates, drugs, technologies and marking of the country of origin on products imported to the U.S. We must also comply with a variety of U.S. laws related to doing business outside of the U.S., including but not limited to, Office of Foreign Asset Controls; United Nations and EU sanctions; the Iran Threat Reduction and Syria Human Rights Act of 2012; rules relating to the use of certain "conflict minerals" under Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act; and regulations enforced by the U.S. Customs and Border Patrol. Further changes in laws, regulations, and practices affecting the pharmaceutical industry and the healthcare system, including imports, exports, manufacturing, quality, cost, pricing, reimbursement, approval, inspection, and delivery of healthcare, may affect our business and operations.

Continuing healthcare reforms and related changes to reimbursement methods in and outside of the United States may have an adverse effect on our financial condition and results of operations.

Increasing healthcare expenditures have received considerable public attention in many of the countries in which we operate. In the U.S., government programs such as Medicare and Medicaid, as well as private insurers, have been focused on cost containment. In some markets in the EU and outside the U.S., the government provides healthcare at low direct cost to consumers and regulates pharmaceutical prices or patient reimbursement levels to control costs for the government-sponsored healthcare system. Both private and governmental entities are seeking ways to reduce or contain healthcare costs. For example, the proposed Affordable Drug Manufacturing Act would create a new office within the U.S. Department of Health and Human Services tasked with manufacturing certain generic drugs to be offered directly to consumers. It is unclear if this proposed legislation will be enacted, but these or similar legislative or regulatory efforts could place further pricing pressure on our products and could negatively impact our results of operations.

Our RX segment in particular could be materially adversely impacted by measures taken by governmental entities or private insurers to restrict patients' access to our products or increase pressure on drug pricing, including denial of price increases, prospective and retrospective price decreases, and increased mandatory discounts or rebates. These actions may drive us and our competitors to decrease prices or may reduce the ability of customers to pay for our products, which could materially negatively impact the RX segment's results of operations.

If we fail to comply with the reporting and payment obligations under the Medicaid rebate program or other governmental purchasing and rebate programs, we could be subject to fines or penalties, which could have an adverse effect on our financial condition and results of operations.

As described in Item 1. Business - Medicaid Rebate Agreement, we have entered into various government drug pricing agreements with the U.S. government. There are inherent risks associated with participating in these programs, including the following:

- By their nature, these programs require us to provide discounts and rebates and therefore reduce our net product revenue. Further, because the amounts of these discounts are based on our commercial sales practices and can be adversely affected by both significant discounts and price increases, it is important that we maintain pricing practices that appropriately take into account these government pricing programs.
- We are required to report pricing data to CMS, including AMP, on a monthly and quarterly basis and BP and ASP on a quarterly basis. We also are required to report quarterly and annual Non-FAMPs to the VA. If we fail to submit required information on a timely basis, make misrepresentations, or knowingly submit false information to the government as to AMP, ASP, or BP, we may be liable for substantial civil monetary penalties or subject to other enforcement actions, such as under the False Claims Act, and CMS may terminate our Medicaid drug rebate agreement. In that event, U.S. federal payments may not be available under Medicaid or Medicare Part B for our covered outpatient drugs.
- Because many of our products may be subject to Medicaid FULs or CMS's Medicaid "actual acquisition cost" payment methodology standard, our products may be subject to reimbursement pressures, and in some cases, those pressures may result from practices outside of our control, including how our competitors price their equivalent products. States are continuing to evaluate their payment methods, and we cannot predict how the FUL or state payment methodologies will affect our pharmacy customers or to what extent these customers may seek additional discounts in light of reimbursement changes in the future. We also cannot predict how the sharing of FUL data and retail survey prices may impact competition in the marketplace in the future.
- Under the 340B program, if we fail to provide required discounts to covered entities, including in connection with the revision of AMP or BP data, we may be subject to refund claims or civil monetary penalties under that program pursuant to new program regulations that became effective January 1, 2019.
- If we inadvertently overcharge the government in connection with our FSS contract or TriCare Agreement, whether due to a misstated FCP or otherwise, we would be required to refund the difference. Failure to make necessary disclosures and/or to identify contract overcharges can result in False Claims Act allegations or potential violations of other laws and regulations. Unexpected refunds to the government, and responses to a government investigation or enforcement action, are expensive and time-consuming, and

could have a material adverse effect on our business, financial condition, results of operations, and growth prospects.

- Our reporting and payment obligations under the Medicaid rebate program and other governmental purchasing and rebate programs are complex and may involve subjective decisions. Our calculations and methodologies are subject to review by the governmental agencies, and it is possible that these reviews could result in challenges to our submissions. If we do not comply with those reporting and payment obligations, we could be subject to civil and/or criminal sanctions, including fines, penalties, and possible exclusion from U.S. federal healthcare programs.

Lack of availability, or significant increases in the cost, of raw materials used in manufacturing our products could adversely impact our profit margins and operating results.

Affordable high quality raw materials and packaging components are essential to all of our business units due to the nature of the products we manufacture. In addition, maintaining good supply relationships is essential to our ongoing operations. See [Item 1. Business - Materials Sourcing](#) for more information.

- We maintain several single-source supplier relationships, either because alternative sources are not available or because the relationship is advantageous due to regulatory, performance, quality, support, or price considerations. Unavailability or delivery delays of single-source components or products could adversely affect our ability to ship the related product in a timely manner. The effect of unavailability or delivery delays would be more severe if associated with our higher-volume or more profitable products. Even where alternative sources of supply are available, qualifying the alternate suppliers and establishing reliable supplies could cost more or result in delays and a loss of net sales. Additionally, global regulatory requirements for obtaining product approvals could substantially lengthen the approval of an alternate material source. As a result, the loss of a single-source supplier could have a material adverse effect on our results of operations.
- The rapid increase in cost of many raw materials from inflationary forces, such as increased energy costs, and our ability or inability to pass on these increases to our customers could have a negative material impact on our financial results.
- Our infant formula products require certain key raw ingredients that are derived from raw milk, such as skim milk powder, whey protein powder, and lactose. Our supply of milk-based ingredients may be limited by the ability of individual dairy farmers and cooperatives to provide raw milk in the amount and quality we deem necessary. Raw milk production is influenced by factors beyond our control including seasonal and environmental factors, governmental agricultural and environmental policy, and global demand. We cannot guarantee that there will be sufficient supplies of these key ingredients necessary to produce infant formula.
- Our products, and the raw materials used to make the products mentioned above, generally have limited shelf lives. Our inventory levels are based, in part, on expectations regarding future sales. We may experience build-ups in inventory if sales slow. Any significant shortfall in sales may result in higher inventory levels of raw materials and finished products, thereby increasing the risk of inventory spoilage and corresponding inventory write-downs and write-offs. Cargo thefts and/or diversions and economically or maliciously motivated product tampering on store shelves may occur, causing unexpected shortages and harm to our reputation, which may have a material impact on our operations.
- We rely on third parties to source many of our raw materials, as well as to manufacture certain dosage forms such as sterile, injectable products that we distribute. We maintain a strict program of verification and product testing throughout the ingredient sourcing and manufacturing process to identify potential counterfeit ingredients, adulterants, and toxic substances. Nevertheless, discovery of previously unknown problems with the raw materials or product manufacturing processes, or new data suggesting an unacceptable safety risk associated therewith, could result in a voluntary or mandatory withdrawal of the contaminated product from the marketplace, either temporarily or permanently. Any future recall or removal would result in additional costs and lost revenue, harm our reputation, and may give rise to product liability litigation.
- Changes in regulation could impact the supply of the API and certain other raw materials used in our products. For example, the EU recently promulgated new standards requiring all API imported into the EU be certified as complying with GMP established by the EU. The regulations placed the certification

requirement on the regulatory bodies of the exporting countries, which led to an API supply shortage in Europe as certain governments were not willing or able to comply with the regulation in a timely fashion, or at all. In addition, due to the recent outbreak of the coronavirus, we could experience supply disruptions related to materials sourced directly and indirectly from China or elsewhere. A shortage in API or other raw ingredients could cause us to have to cease manufacture of certain products, or to incur costs and delays to qualify other suppliers to substitute for those API manufacturers who are unable to export. This could have a material adverse effect on our business, results of operations, financial condition, and cash flow.

A disruption at any of our main manufacturing facilities could materially and adversely affect our business, financial position, and results of operations.

Our manufacturing operations are concentrated in a few locations. See [Item 1. Business - Manufacturing and Distribution](#) for more information on our significant operations. A significant disruption at one or more of these facilities, whether it be due to fire, natural disaster, power loss, intentional acts of vandalism, climate change, war, terrorism, insufficient quality, or pandemic could materially and adversely affect our business.

Additionally, regulatory authorities routinely inspect all of our manufacturing facilities for cGMP compliance. While our manufacturing sites are cGMP compliant, if a regulatory authority were to identify serious adverse findings not corrected upon follow up inspections, we may be required to issue product recalls, shutdown manufacturing facilities, and take other remedial actions. If any manufacturing facility were forced to cease or limit production, our business could be adversely affected.

Any breach, disruption or misuse of our or our external business partners' information systems or cyber security efforts could have a material adverse effect on our business.

We are increasingly dependent upon information technology systems to operate our business. Our systems, information and operations are highly complex and interrelated with our external business partners. These systems may contain confidential information (including personal data, trade secrets or other intellectual property, or proprietary business information). The nature of digital systems, both internally and externally, makes them potentially vulnerable to disruption or damage from human error and/or security breaches, which include, but are not limited to, ransomware, data theft, denial of service attacks, sabotage, industrial espionage, and computer viruses. Such events may be difficult to detect, and once detected, their impact may be difficult to assess and address.

Cyber attacks have become increasingly common for us and our external business partners, and we have experienced immaterial business disruption and data loss as a result of phishing, business email compromise and other types of attacks on our information technology systems and those of our external business partners. While we continue to employ resources to monitor our systems and protect our infrastructure, these measures may prove insufficient depending upon the attack or threat posed, and that could subject us to significant risks, including, without limitation:

- Ransomware attacks, other cyber breaches or disruptions that impair our ability to develop products, meet regulatory approval requirements or deadlines, produce or ship products, take or fulfill orders, and/or collect or make payments on a timely basis;
- System issues, whether as a result of an intentional breach or a natural disaster, that damage our reputation and cause us to lose customers, experience lower sales volume, and/or incur significant liabilities;
- Significant expense to remediate the results of any attacks or breaches and to ensure compliance with any required disclosures mandated by the numerous global privacy and security laws and regulations; and
- Interruptions, security breaches, or loss, misappropriation, or unauthorized access, use or disclosure of confidential information,

which, individually or collectively, could result in financial, legal, business or reputational harm to us and could have a material adverse effect on our business, financial condition and results of operations.

In addition, our information technology systems may be vulnerable to damage or interruption from circumstances beyond our control, including fire, natural disasters, power outages, systems failures and viruses. If we are unable to execute our disaster recovery and business continuity plans, or if our plans prove insufficient for a

particular situation or take longer than expected to implement in a crisis situation, it could have a material adverse effect on our business, financial condition and results of operations, and our business interruption insurance may not adequately compensate us for losses that may occur.

We are also subject to numerous laws and regulations designed to protect personal data, such as the California Consumer Privacy Act and national laws implementing the GDPR. These data protection laws introduced more stringent data protection requirements and significant potential fines, as well as increased our responsibility and potential liability in relation to personal data that we process. We have put mechanisms in place to ensure compliance with applicable data protection laws but there can be no guarantee of their effectiveness.

Our business depends upon certain customers for a significant portion of our sales, therefore our business would be adversely affected by a disruption of our relationship with these customers or any material adverse change in these customers' businesses.

Sales to our largest customer, Walmart, comprised approximately 13.0% of our net sales for the year ended December 31, 2019. While no other customer individually comprised more than 10% of net sales, we do have other significant customers. If our relationship with Walmart or any of our other significant customers, including the terms of doing business with the customers, changes significantly, it could have a material adverse impact on us (refer to [Item 1. Business - Significant Customers](#)).

Many of our customers, which include major global, national, and regional retail drug, supermarket, and mass merchandise chains, major wholesalers, sourcing groups, hospitals, pharmacies, and drug and grocery stores located primarily in Europe, continue to merge or consolidate. Such consolidation has provided, and may continue to provide, customers with additional purchasing leverage, and consequently may increase the pricing pressures we face. The emergence of large buying groups representing independent retail pharmacies enable those groups to extract price discounts on our products. In addition, several of our customers have instituted sourcing programs limiting the number of suppliers of generic pharmaceutical products carried by that customer. These developments have resulted in heightened pricing pressure on our products, as well as competition among generic drug producers for business from a smaller and more selective customer base.

Additionally, if we are unable to maintain adequately high levels of customer service over time, customers may choose to assess penalties, obtain alternate sources for products, and/or end their relationships with us.

Although we have divested our rights to the Tysabri[®] royalty stream, we are entitled to an additional milestone payment if a certain specified threshold is met, and any negative developments related to Tysabri[®] could have a material adverse effect on our potential receipt of this payment.

During the year ended December 31, 2017, we divested the Tysabri[®] financial asset to Royalty Pharma for \$2.2 billion in upfront cash and up to \$250.0 million and \$400.0 million in milestone payments. We received the \$250.0 million royalty payment on February 22, 2019. In order for us to receive the milestone payment related to 2020 of \$400.0 million, the payments received by Royalty Pharma from Biogen for Tysabri[®] sales in 2020 must exceed \$351.0 million. The 2018 Royalty Pharma payments from Biogen for Tysabri[®] were \$337.5 million.

We elected to account for the contingent milestone payments using the fair value option method, and these were recorded at an estimated fair value of \$134.5 million as of December 31, 2017. Upon Tysabri[®] meeting the 2018 global net sales threshold we recorded a \$170.1 million gain in Change in financial assets. The fair value of the milestone payment related to 2020 is \$95.3 million as of December 31, 2019. Our receipt of the milestone payment related to 2020 may be negatively impacted if the royalty stream decreases and is insufficient to meet the specified thresholds. Given the fact that the milestone payment related to 2020 is recorded at fair value, if it is determined that Tysabri[®] global sales levels do not meet specific thresholds, we would recognize a material charge in the Consolidated Statement of Operations. Factors that may have an adverse effect on the Tysabri[®] royalty stream include:

- Companies working to develop new therapies or alternative formulations of products for multiple sclerosis that, if successfully developed, would compete with, or could gain greater acceptance than, Tysabri[®] and damage its market share. For example, in February 2016, a competitor's pipeline product, Ocrevus[®], received breakthrough therapy designation from the FDA, and this product was launched in 2017. The

product competes with Tysabri[®] and could have a significant negative impact on the Tysabri[®] royalty stream;

- Biogen is the owner of the patents on Tysabri[®]. The loss of protection of these patents, such as a patent invalidation, could adversely affect the royalty stream from Tysabri[®]. In addition, once the Tysabri[®] patents expire, other generic companies may introduce products similar to Tysabri[®] that could adversely affect the royalty stream;
- Foreign currency movement, which could have a negative impact on Royalty Pharma's Tysabri[®] sales, thereby reducing the royalties;
- Any negative developments relating to Tysabri[®], such as safety, efficacy, or reimbursement issues, could reduce demand for Tysabri[®]; and
- Adverse regulatory or legislative developments could limit or prohibit the sale of Tysabri[®], such as restrictions on the use of Tysabri[®] or safety-related label changes, including enhanced risk management programs, which may significantly reduce expected royalty revenue and require significant expense and management time to address the associated legal and regulatory issues.

Additionally, Tysabri[®] sales growth cannot be assured given the significant restrictions on its use and the significant safety warnings on the label, including the risk of developing Progressive Multifocal Leukoencephalopathy ("PML"), a serious brain infection. The risk of developing PML may increase with prior immunosuppressant use, longer treatment duration, or the presence of certain antibodies. Increased incidence of PML could limit sales growth, prompt regulatory review, require significant changes to the label, or result in market withdrawal. In addition, the result of ongoing or future clinical trials involving Tysabri[®] or other adverse events reported in association with the use of Tysabri[®] may have an adverse impact on prescribing behavior and reduce sales of Tysabri[®].

Furthermore, there can be no assurance that Royalty Pharma will pay the 2020 milestone payment even if the specified thresholds are met.

We are dependent on the services of certain key members of management. Our inability to successfully manage transition, or the failure to attract and retain other key members of management, may have a material adverse impact on our results of operations.

We are dependent on the services of certain key employees, and our future success will depend in large part upon our ability to attract and retain highly skilled employees. Key functions for us include executive managers, operational managers, R&D scientists, information technology specialists, financial and legal specialists, regulatory professionals, quality compliance specialists, and sales/marketing personnel. If we are unable to attract or retain key qualified employees, our future operating results may be adversely impacted.

Management transition creates uncertainties, and any difficulties we experience in managing such transitions may negatively impact our business.

On February 7, 2020, we announced the retirement of Jeff Needham and appointed Rich Sorota as the Executive Vice President and President of CSCA effective March 23, 2020. Changes in executive management create uncertainty. Moreover, changes in our company as a result of management transition could have a disruptive impact on our ability to implement, or result in changes to, our strategy and could negatively impact our business, financial condition and results of operations.

Unfavorable publicity or consumer perception of the safety, quality, and efficacy of our products could have a material adverse impact on our business.

We are dependent upon consumers' perception of the safety, quality, and efficacy of our products, and may be affected by changing consumer preferences. Negative consumer perception may arise from media reports, product liability claims, regulatory investigations, or recalls, regardless of whether they involve us or our products. The mere publication of information asserting defects in products or ingredients, or concerns about our products or the materials used in our products, could discourage consumers from buying our products, regardless of whether such information is scientifically supported.

- Our products involve risks such as product contamination, spoilage, mislabeling, and tampering that could require us to recall one or more of our products. Serious product quality concerns could also result in governmental actions against us that, among other things, could result in the suspension of production or distribution of our products, product seizures, loss of certain licenses, delays in the issuance of governmental approvals for new products, or other governmental penalties, all of which could be detrimental to our reputation and reduce demand for our products.
- We cannot guarantee that counterfeiting, imitation or other tampering with our products will not occur or that we will be able to detect and resolve it. Any counterfeiting or contamination of any products could negatively impact our reputation and sales, particularly if counterfeit or imitation products cause death or injury to consumers.
- Many of the brands we acquired from Omega Pharma Invest N.V ("Omega") have European recognition. This recognition is the result of the large investments Omega made (and we continue to make) in its products over many years. The quality and safety of the products are critical to our business. If we are unable to effectively manage real or perceived issues, including concerns about safety, quality, efficacy, or similar matters, sentiments toward us and our products could be negatively impacted.
- Our CSCI segment's financial success is dependent on the success of its brands, and the success of these brands can suffer if marketing plans or product initiatives do not have the desired impact on a brand's image or its ability to attract consumers, and the performance of the segment may be negatively impacted if spending on such plans and initiatives does not generate the returns we anticipate. In addition, given the association of individual products within the commercial network of our CSCI segment, an issue with one of our products could negatively affect the reputation of other products, thereby potentially hurting our financial results.
- Powdered infant formula products are not sterile. All of our infant formula products must be prepared and maintained according to label instruction to retain their flavor and nutritional value and avoid contamination or deterioration. Depending on the product, a risk of contamination or deterioration may exist at each stage of the production cycle, including the purchase and delivery of raw materials, the processing and packaging of food products, and the use and handling by consumers, hospital personnel, and healthcare professionals. If certain of our infant formula products are found or alleged to have suffered contamination or deterioration, whether or not under our control, our reputation and our infant formula product category sales could be materially adversely affected.

Increasing use of social media could give rise to liability, breaches of data security, or reputation damage.

The Company and our employees increasingly utilize social media as a means of internal and external communication.

- To the extent that we seek to use social media tools to communicate about our products and/or business, there are uncertainties as to the rules that apply to such communications, or as to the interpretations that authorities will apply to the rules that exist. As a result, despite our efforts to monitor evolving social media communication guidelines and comply with applicable rules, there is risk that our use of social media for such purposes may cause us to be found in violation of them. A violation of such guidelines may damage our reputation as well as cause potential lawsuits and adversely affect our operating activities.
- Our employees may knowingly or inadvertently make use of social media tools in ways that may not be aligned with our social media strategy, may give rise to liability, or could lead to the loss of trade secrets or other intellectual property, or public exposure of personal information (including sensitive personal information) of our employees, clinical trial patients, customers, and others.
- Negative posts or comments about us, store brands or generic pharmaceuticals, or our products in social media could seriously damage our reputation and could adversely affect our business. In addition, negative posts or comments about our products could result in increased pharmacovigilance reporting requirements, which may give rise to liability if we fail to fully comply with such requirements.

Our quarterly results are impacted by several factors, some of which are beyond the control of our management, that may result in significant quarter-to-quarter fluctuations in operating results.

Some of the factors that may impact our quarterly results include, but are not limited to, the severity, length and timing of the cough/cold/flu and allergy seasons, the timing of new product approvals and introductions by us and our competitors, price competition, changes in the regulatory environment, changes in accounting pronouncements, changes in the levels of inventories maintained by our customers, and the timing of retailer promotional programs. These and other factors may result in significant variations in our operating results from quarter to quarter.

We may not be able to sustain or improve operating results in our business segments.

Several factors may impact our ability to sustain or improve the operating results of our business segments. These factors include but are not limited to, the continued impact of pricing pressure, the success of new product launches, the impact of manufacturing disruptions or delays, and the success of strategic improvement initiatives. There can be no assurance that we will not continue to experience challenges related to our segments, and these challenges could have a material impact on our business, cash flows, and results of operations or result in impairment charges, and the market value of our ordinary shares and/or debt securities may decline.

We may not realize the benefits of business acquisitions and divestitures we enter into, which could have a material adverse effect on our operating results.

In the normal course of business, we engage in discussions relating to possible acquisitions and divestitures. These transactions are accompanied by several risks. Many of these risks are beyond our control, and any one of them could result in increased cost, decreased net sales and diversion of management's time and energy, any or all of which could materially impact our business, financial condition, and results of operations.

Acquisitions

One of our strategies is inorganic growth through the acquisition of products and companies that we expect will benefit the Company. This strategy comes with several financial, managerial, and operational risks. We may not realize the benefits of an acquisition because of integration and other challenges, including, but not limited to the following:

- Difficulty involved with managing the expanded operations of the respective parties, as well as identifying the extent of all weaknesses, risks, and contingent and other liabilities;
- Uncertainties involved in assessing the value, strengths, and potential profitability of the respective parties, as well as identifying the extent of all weaknesses, risks, and contingent and other liabilities of acquisition targets;
- Unanticipated changes in the business, industry, market or general economic conditions different from the assumptions underlying our rationale for pursuing the transaction;
- Difficulties due to a lack of, or limited experience in, any new product or geographic markets we enter;
- Inability to achieve identified operating and financial synergies, or return on investment, from an acquisition in the amounts or on the time frame anticipated;
- Substantial demands on our management, operational resources, technology, and financial and internal control systems, which could lead to dissatisfaction and potential loss of key customers, management, or employees;
- Integration activities that may detract attention from our day-to-day business, and substantial costs associated with the transaction process or other material adverse effects as a result of these integration efforts; and
- Difficulties, restrictions or increased costs associated with raising future capital in connection with an acquisition may impact our liquidity, credit ratings and financial position, thereby making it more difficult, restrictive or expensive to raise future capital. In addition, the issuance of equity to pay a portion of the purchase price for an acquisition would dilute our existing shareholders.

Divestitures

We may evaluate potential divestiture opportunities with respect to portions of our business (including specific assets or categories of assets) from time to time, and may proceed with a divestiture opportunity if and when we believe it is consistent with our business strategy and initiatives. Any future divestitures could expose us to significant risk, including without limitation:

- Our ability to effectively transfer liabilities, contracts, facilities and personnel to any purchaser;
- Fees for legal and transaction-related services;
- Diversion of management resources; and
- Loss of key personnel and reduction in revenue.

If we do not realize the expected strategic, economic or other benefits of any divestiture transaction, it could adversely affect our financial condition and results of operations.

The plan to separate our RX business is contingent upon several conditions, is subject to change in form or timing, may not achieve the intended benefits, and could adversely affect our business and financial condition.

On August 9, 2018, we announced a plan to separate our RX business, which, when completed, will enable us to focus on expanding our consumer-focused businesses. In 2019, we continued preparations related to our planned separation, which may include a possible sale, spin-off, merger or other form of separation. While we remain committed to transforming to a consumer-focused business, we have not committed to a specific date or form for the separation.

The separation of the RX business could impact our ability to retain key employees, comply with existing debt arrangements, maintain our credit ratings and raise future capital. Further, even if the separation is completed, we may not achieve the anticipated operational, financial, strategic or other benefits of the separation. After the separation, the combined value and financial performance of the Company and RX business may not equal the value and financial performance of the Company had the separation not occurred.

In connection with the proposed separation, we have incurred significant preparation costs and will continue to incur costs that, when completed, will be in the range of \$45.0 million to \$80.0 million, excluding restructuring expenses and transaction costs, depending on the final timing and structure of the transaction. In addition, completion of the separation will require a significant amount of management time and effort, which may disrupt our business or otherwise divert management's attention from other aspects of our business, including our other strategic initiatives, possible organic or inorganic growth opportunities, and customer and vendor relationships. Any of the foregoing risks could adversely affect our business, results of operations, liquidity, and financial condition.

Our business could be negatively affected by the performance of our collaboration partners and suppliers.

We have entered into strategic alliances with partners and suppliers to develop, manufacture, market and/or distribute certain products, or components of our products in various markets. We commit substantial effort, funds and other resources to these various collaborations. There is a risk that our investments in these collaborative arrangements will not generate financial returns. While we believe our relationships with our partners and suppliers generally are successful, disputes, conflicting priorities or regulatory or legal intervention could be a source of delay or uncertainty as to the expected benefit of the collaboration (refer to [Item 8. Note 18](#)). A failure or inability of our partners or suppliers to fulfill their collaboration obligations, or the occurrence of any of the risks above, could have an adverse effect on our business, financial condition, and results of operations.

We have acquired significant assets that could become impaired or subject us to losses and may result in an adverse impact on our results of operations.

We have recorded significant goodwill and intangible assets on our balance sheet as a result of previous acquisitions, which could become impaired and lead to material charges in the future.

During the year ended December 31, 2019, we recorded a goodwill impairment charge of \$109.2 million in our RX segment, definite-lived impairment charges of \$69.5 million in our RX and CSCI segments, and \$5.8 million of impairment charges related to certain in-process research and development ("IPR&D") assets in our CSCA, CSCI, and RX segments.

During the year ended December 31, 2018, we recorded goodwill, definite-lived and indefinite-lived intangible asset impairment charges of \$136.7 million, \$49.6 million and \$27.7 million primarily in our CSCA segment, respectively, and \$8.7 million of impairment charge related to certain IPR&D assets in our CSCA segment.

During the year ended December 31, 2017, we recorded definite-lived intangible asset impairment charges of \$19.7 million related to developed product technology/formulation and product rights, and distribution and license agreements primarily in our RX segment and \$12.7 million of impairment charge related to certain IPR&D assets primarily in our RX segment.

We perform an impairment analysis on intangible assets subject to amortization when there is an indication that the carrying amount of any individual asset may not be recoverable. Any significant change in market conditions, estimates or judgments used to determine expected future cash flows that indicates a reduction in carrying value may give rise to impairment in the period that the change becomes known. Goodwill, indefinite-lived intangible asset, and definite-lived intangible asset impairments are recorded in Impairment charges on the Consolidated Statement of Operations. As of December 31, 2019, the net book value of our goodwill and intangible assets were \$4.1 billion and \$3.0 billion, respectively (refer to [Item 8. Note 4](#)).

There can be no assurance that our strategic initiatives will achieve their intended effects.

We are in the process of implementing certain initiatives designed to increase operational efficiency and improve our return on invested capital by globalizing our supply chain through global shared service arrangements, streamlining our organizational structure, making key executive employee changes, performing a strategic portfolio review, and disposing of certain assets. Furthermore, we are transitioning into a consumer-focused, self-care company. We believe these initiatives will enhance our net sales, operating margins, and earnings; however, there can be no assurance that these initiatives will produce the anticipated benefits. Any delay or failure to achieve the anticipated benefits could have a material adverse effect on our projected results.

While we have remediated previously identified material weaknesses in our internal control over financial reporting related to our income tax process, we may identify other material weaknesses in the future.

We are required to evaluate the effectiveness of our disclosure controls on a periodic basis and publicly disclose the results of these evaluations and related matters in accordance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002. During the years ended December 31, 2016 and December 31, 2017, we identified certain material weaknesses in our internal control over financial reporting that related to the matters associated with our income tax process, which have been remediated.

While we have remediated those previously identified material weaknesses, there can be no assurances that our controls will remain adequate. Any failure to implement or maintain required new or improved controls, or any difficulties we encounter in their implementation, including retention of key employees, could result in additional material weaknesses or material misstatements in our Consolidated Financial Statements. Any new misstatement could cause us to fail to meet our reporting obligations, reduce our ability to obtain financing or cause investors to lose confidence in our reported financial information, leading to a decline in our stock price. We cannot assure you that we will not discover additional weaknesses in our internal control over financial reporting.

Global Risks

Our business, financial condition, and results of operations are subject to risks arising from the international scope of our operations.

We manufacture, source raw materials, and sell our products in a number of countries. The percentage of our business outside the U.S. has been increasing. We are subject to risks associated with international manufacturing and sales, including:

- Unexpected changes in regulatory requirements;
- Problems related to markets with different cultural biases or political systems;
- Possible difficulties in enforcing agreements;
- Longer payment cycles and shipping lead-times;
- Difficulties obtaining export or import licenses;
- Changes to U.S. and foreign trade policies, including the enactment of tariffs on goods imported into the U.S., including but not limited to, goods imported from China; and
- Imposition of withholding or other taxes.

Additionally, we are subject to periodic reviews and audits by governmental authorities responsible for administering import and export regulations. To the extent that we are unable to successfully defend against an audit or review, we may be required to pay assessments, penalties, and increased duties.

Certain of our facilities operate in a special purpose sub-zone established by the U.S. Department of Commerce Foreign Trade Zone Board, which allows us certain tax advantages on products and raw materials shipped through these facilities. If the Foreign Trade Zone Board were to revoke the sub-zone designation or limit our use, we could be subject to increased duties.

Although we believe that we conduct our business in compliance with applicable anti-corruption, anti-bribery and economic sanctions laws, if we are found to not be in compliance with such laws or other anti-corruption laws, we could be subject to governmental investigations, legal or regulatory proceedings, substantial fines, and/or other legal or equitable penalties. This risk increases in locations outside of the U.S., particularly in locations that have not previously had to comply with the FCPA, U.K. Bribery Act 2010, Irish Criminal Justice (Corruption Offenses) Act 2018, and similar laws.

We operate in jurisdictions that could be affected by economic and political instability, which could have a material adverse effect on our business.

Our operations and supply partners could be affected by economic or political instability, embargoes, military hostilities, unstable governments and legal systems, and inter-governmental disputes. We have significant operations in Israel, which has experienced varying degrees of hostility in recent years. Doing business in Israel and certain other regions involves the following risks:

- Certain countries and international organizations have refused to do business with companies with Israeli operations. We are also precluded from marketing our products to certain countries due to U.S. and Israeli regulatory restrictions. International economic sanctions and boycotts of our products could negatively impact our sales and ability to export our products.
- Our facilities in Israel are within a conflict zone. If terrorist acts or military actions were to result in substantial damage to our facilities, our business activities would be disrupted since, with respect to most products, we would need to obtain prior regulatory agency approval for a change in manufacturing site.

- The U.S. Department of State and other governments have at times issued advisories regarding travel to certain countries in which we do business. As a result, regulatory agencies have, at various times, curtailed or prohibited their inspectors from traveling to inspect facilities. If these inspectors are unable to inspect our facilities, the regulatory agencies could withhold approval for new products intended to be produced at those facilities.
- Our international operations may be subject to interruption due to travel restrictions, war, terrorist acts, and other armed conflicts. Also, further threats of armed hostilities in certain countries could limit or disrupt markets and our operations, including disruptions resulting from the cancellation of contracts or the loss of assets. These events could have a material adverse effect on our international business operations.
- On June 23, 2016, the UK electorate voted in a referendum to voluntarily depart from the EU, known as "Brexit". Following the formation of a majority Conservative government in December 2019, the UK approved the withdrawal agreement and left the EU on January 31, 2020. The terms of the UK's final withdrawal remain subject to ongoing negotiation until December 31, 2020, during which current EU regulations will continue to apply in the UK. The UK Parliament banned extensions to the transition period, so the UK must finalize new trading agreements with the EU by December 31, 2020. Trade negotiations are expected to begin in early March 2020, but the nature of the economic relationship between the EU and UK remains uncertain, and there is no guarantee that both parties will be able to reach an agreement before the transition period expires. Additionally, the UK will likely negotiate trade deals with other partners, including the United States. Brexit has created significant instability and volatility in the global financial markets, has led to significant weakening of the British pound compared to the U.S. dollar and other currencies, and could adversely affect European or worldwide economic or market conditions. Although it is unknown what the future trading terms with the EU will be, they may impair the ability of our operations in the EU to transact business in the future in the UK, and similarly the ability of our UK operations to transact business in the future in the EU. Specifically, it is possible that there will be greater restrictions on imports and exports, including possible tariffs, between the UK and EU countries, increased restrictions on freedom of movement for employees, and increased regulatory complexities. Future trading terms between the UK and other trading partners are also unknown. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the UK determines which EU laws to replace or replicate. We are actively monitoring Brexit updates from a government and regulatory perspective. We are preparing for a "hard (no confirmed trading deal with the EU) Brexit", which is intended to ensure we meet both applicable EU and UK regulatory requirements as well as stock-builds to secure supply continuity. There can be no assurances, however, that these preparations will be sufficient or that the final exit terms will be as we anticipate. Any of the above mentioned effects of Brexit, and others we cannot anticipate, could adversely affect our business, business opportunities, operations, and financial results.
- While the challenging global economic environment has not had a material impact on our liquidity or capital resources, there can be no assurance that possible future changes in global financial markets and global economic conditions will not affect our liquidity or capital resources, impact our ability to obtain financing, or decrease the value of our assets.
- The challenging economic conditions have also impacted the movements in exchange rates, which have experienced significant recent volatility. Uncertainty regarding the future growth rates between countries, the influence of central bank actions, and the changing political environment globally may contribute to continued high levels of exchange rate volatility, which could have an adverse impact on our results.
- Our customers could be adversely impacted if U.S. economic conditions worsen. Our CSCA segment does not advertise our store brand products like national brand companies and thus is largely dependent on retailer promotional activities to drive sales volume and increase market share. If our customers do not have the ability to invest in store brand promotional activities, our sales may suffer. Additionally, while we actively review the credit worthiness of our customers and suppliers, we cannot fully predict to what extent they may be negatively impacted by slowing economic growth.

The international scope of our business exposes us to risks associated with foreign exchange rates.

We report our financial results in U.S. dollars. However, a significant portion of our net sales, assets, indebtedness and other liabilities, and costs are denominated in foreign currencies. These currencies include, among others, the Euro, Indian rupee, British pound, Canadian dollar, Israeli shekel, Australian dollar, and Mexican peso. Our Branded Consumer Self-care business is a euro-denominated business that represents a significant portion of our net sales, net earnings and net assets.

In addition, several emerging market economies are particularly vulnerable to the impact of rising interest rates, inflationary pressures, weaker oil and other commodity prices, and large external deficits. Risks in one country can limit our opportunities for portfolio growth and negatively affect our operations in another country or countries. As a result, any such unfavorable conditions or developments could have an adverse impact on our operations. Our results of operations and, in some cases, cash flows, have in the past been, and may in the future be, adversely affected by movements in exchange rates. In addition, we may also be exposed to credit risks in some of those markets. We may implement currency hedges or take other actions intended to reduce our exposure to changes in foreign currency exchange rates. If we are not successful in mitigating the effects of changes in exchange rates on our business, any such changes could materially impact our results.

Litigation and Insurance Risks

We are or may become involved in lawsuits and may experience unfavorable outcomes of such proceedings.

We may become involved in lawsuits arising from a wide variety of commercial, manufacturing, development, marketing, sales and other business-related matters, including, but not limited to, competitive issues, pricing, contract issues, intellectual property matters, false advertising, unfair competition, taxation matters, workers' compensation, product quality/recall, environmental remediation, securities law, disclosure, and regulatory issues. Litigation is unpredictable and can be costly. We intend to vigorously defend against any lawsuits, however, we cannot predict how the cases will be resolved. Adverse results in the cases could result in substantial monetary judgments. No assurance can be made that litigation will not have a material adverse effect on our financial position or results of operations in the future (refer to [Item 8. Note 17](#)).

- We may be subject to liability if our products violate applicable laws or regulations in the jurisdictions where our products are distributed. The successful assertion of product liability or other product-related claims against us could result in potentially significant monetary damages, and we could incur substantial legal expenses. Even if a product liability or consumer fraud claim is unsuccessful, not merited, or not fully pursued, we may still incur substantial legal expenses defending against such a claim, and our reputation may suffer.
- We may face environmental exposures including, for example, those relating to discharges from and materials handled as part of our operations, the remediation of soil and groundwater contaminated by hazardous substances or wastes, and the health and safety of our employees. We may in the future face liability for the costs of investigation, removal or remediation of certain hazardous substances or petroleum products on, under or in our currently or formerly owned property, or from a third-party disposal facility that we may have used, without regard to whether we knew of, or caused, the presence of the contaminants. The actual or alleged presence of these substances, or the failure to remediate them, could have adverse effects, including, for example, substantial investigative or remedial obligations and limitations on our ability to sell or rent affected property or to borrow funds using affected property as collateral. There can be no assurance that environmental liabilities and costs will not have a material adverse effect on us. See [Item 1. Business - Information Applicable to All Reportable Segments - Environmental](#) for more information.
- Our CSCI and CSCA segments regularly make advertising claims regarding the effectiveness of their products, which we are responsible for defending. An unsuccessful defense of a product-related claim could result in potentially significant monetary damages and substantial legal expenses. Even if a claim is unsuccessful, not merited, or not fully pursued, we may still incur substantial legal expenses defending against such a claim, and our reputation could suffer.
- Additionally, we are the target of claims asserting violations of securities fraud and derivative actions, or other litigation proceedings, and may be in the future.

Increased scrutiny on pricing practices and competition in the pharmaceutical industry, including antitrust enforcement activity by government agencies and class action litigation, may have an adverse impact on our business and results of operations.

There has been increased scrutiny regarding sales, marketing, and pricing practices in the pharmaceutical industry, including criminal antitrust investigations regarding drug pricing, multiple civil antitrust litigations initiated by governmental and private plaintiffs against pharmaceutical manufacturers and individuals, and media reports.

On May 2, 2017, we disclosed that search warrants were executed at several Perrigo facilities and other locations in connection with the Antitrust Division's ongoing investigation related to drug pricing in the pharmaceutical industry. Although no charges have been brought to date against Perrigo or any of our current employees (or, to the best of our knowledge, former employees), we take the investigation very seriously.

If criminal antitrust charges are filed involving Perrigo, we would incur substantial litigation and other costs, and could face substantial monetary penalties, injunctive relief, negative publicity and damage to our reputation. Regardless of the ultimate outcome, responding to those charges would divert management's time and attention and could impair our operations. Further, we cannot predict whether legislative or regulatory changes may result from the ongoing public scrutiny of our industry, what the nature of any such changes might be, or what impact they may have on Perrigo. Any of these developments could have a material adverse impact on our business, results of operations, and reputation. While we intend to defend these lawsuits vigorously, any adverse decision could have a material adverse impact on our business, results of operations and reputation.

We are cooperating with the government's investigation and are committed to operating our business in compliance with all applicable laws and regulations and the highest standards of ethical conduct. We do not condone, and will not countenance, any violation of these standards by our employees, agents, and business partners.

In addition, we have been named as a co-defendant with certain other generic pharmaceutical manufacturers in a number of class action lawsuits alleging that we engaged in anti-competitive behavior to fix or raise the prices of certain drugs starting, in some instances, as early as June 2013 (refer to [Item 8. Note 17](#)). While we intend to defend these lawsuits vigorously, any adverse decision could have a material adverse impact on our business, results of operations and reputation.

Publishing earnings guidance subjects us to risks, including increased stock volatility, that could lead to potential lawsuits by investors.

Because we publish earnings guidance, we are subject to several risks. Actual results may vary from the guidance we provide investors from time to time, such that our stock price may decline following, among other things, any earnings release or guidance that does not meet market expectations.

It has become increasingly commonplace for investors to file lawsuits against companies following a rapid decrease in market capitalization. We have been in the past, are currently, and may be in the future, named in these types of lawsuits. These types of lawsuits can be costly and divert management attention and other resources away from our business, regardless of their merits, and could result in adverse settlements or judgments, which could have a material impact on the Company.

Third-party patents and other intellectual property rights may limit our ability to bring new products to market and may subject us to potential legal liability, causing us to incur significant costs.

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.

- As a manufacturer of generic pharmaceutical products, the ability of our CSCA, CSCI, and RX segments to bring new products to market is often limited by third-party patents or proprietary rights and regulatory exclusivity periods awarded on products. Launching new products prior to resolution of intellectual property issues may result in us incurring legal liability if the related litigation is later resolved against us. The cost and time for us to develop prescription and Rx-to-OTC switch products is significantly greater than the rest of the new products that we introduce. Any failure to bring new products to market in a timely manner could cause us to lose market share, and our operating results could suffer.
- We could have to defend against charges that we violated patents or proprietary rights of third parties. This could require us to incur substantial expense and could divert significant effort of our technical and management personnel. If we are found to have infringed on the rights of others, we could lose our right to develop or manufacture some products or could be required to pay monetary damages or royalties to license proprietary rights from third parties. Additionally, if we choose to settle a dispute through licensing or similar arrangements, the costs associated with these arrangements may be substantial and could include ongoing royalties. An adverse determination in a judicial or administrative proceeding or failure to obtain necessary licenses could prevent us from manufacturing and selling a number of our products.
- At times, our CSCA or RX segments may seek approval to market drug products before the expiration of patents for those products, based upon our belief that such patents are invalid, unenforceable or would not be infringed by our products. In these cases, we may face significant patent litigation. Depending upon a complex analysis of a variety of legal and commercial factors, we may, in certain circumstances, elect to market a generic pharmaceutical product while litigation is pending, before any court decision, or while an appeal of a lower court decision is pending, known as an "at risk" launch. The risk involved in an "at risk" launch can be substantial because, if a patent holder ultimately prevails, the remedies available to the patent holder may include, among other things, damages measured by the profits lost by the holder, which are often significantly higher than the profits we make from selling the generic version of the product. By electing to proceed in this manner, we could face substantial damages if we receive an adverse final court decision. In the case where a patent holder is able to prove that our infringement was "willful" or "exceptional," under applicable law, the patent holder may be awarded up to three times the amount of its actual damages or we may be required to pay attorneys' fees.

The success of certain of our products depends on the effectiveness of measures we take to protect our intellectual property rights and patents.

If we fail to adequately protect our intellectual property, competitors may manufacture and market similar products.

- We have been issued patents covering certain of our products, and we have filed, and expect to continue to file, patent applications seeking to protect newly developed technologies and products in various countries. Any existing or future patents issued to or licensed by us may not provide us with any significant competitive advantages for our products or may even be challenged, invalidated, or circumvented by competitors. In addition, patent rights may not prevent our competitors from developing, using, or commercializing non-infringing products that are similar or functionally equivalent to our products.
- We also rely on trade secrets, unpatented proprietary know-how, and continuing technological innovation that we seek to protect, in part by confidentiality agreements with licensees, suppliers, employees, and consultants. If these agreements are breached, we may not have adequate remedies for any such breach. Disputes may arise concerning the ownership of intellectual property or the applicability of confidentiality agreements. Furthermore, trade secrets and proprietary technology may otherwise become known or be independently developed by competitors or, if patents are not issued with respect to products arising from research, we may not be able to maintain the value of such intellectual property rights.

Significant increases in the cost or decreases in the availability of the insurance we maintain could adversely impact our financial condition.

To protect the Company against various potential liabilities, we maintain a variety of insurance programs, including property, general, product, and directors' and officers' liability. We may reevaluate and change the types and levels of insurance coverage that we purchase. We are self-insured when insurance is not available or not available at reasonable premiums. Risks associated with insurance plans include:

- Insurance costs could increase significantly, or the availability of insurance may decrease, either of which could adversely impact our financial condition;
- Deductible or retention amounts could increase, or our coverage could be reduced in the future and to the extent losses occur, there could be an adverse effect on our financial results depending on the nature of the loss and the level of insurance coverage we maintained;
- Insurance may not be available to us at an economically reasonable cost or our insurance may not adequately cover our liability in connection with claims brought against us; and
- As our business inherently exposes us to claims, we may become subject to claims for which we are not adequately insured. Unanticipated payment of a large claim may have a material adverse effect on our business.

Tax Related Risks

The resolution of uncertain tax positions, including the Notices of Proposed Adjustments and Notice of Assessment, could be unfavorable, which could have an adverse effect on our business.

Although we believe that our tax estimates are reasonable and that our tax filings are prepared in accordance with all applicable tax laws, the final determination with respect to any tax audit or any related litigation could be materially different from our estimates or from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on operating results or cash flows in the periods for which that determination is made and in future periods after the determination. In addition, future period earnings may be adversely impacted by litigation costs, settlements, penalties or interest assessments.

We are currently involved in several audits and adjustment-related disputes, including related litigation. This includes litigation in the United States District Court for the Western District of Michigan regarding our fiscal years ended June 27, 2009, June 26, 2010, June 25, 2011, and June 30, 2012. The United States District Court for the Western District of Michigan has scheduled a trial date in late May 2020 in response to our complaint filed on August 15, 2017 to recover \$163.6 million of Federal income tax, penalties and interest assessed and collected by the IRS. Additionally, the IRS has proposed adjustments regarding the deductibility of interest for the years ended June 29, 2013, June 28, 2014, and June 27, 2015 and the IRS has proposed adjustments regarding litigation costs and transfer pricing positions for Athena Neuroscience, Inc. ("Athena"), a subsidiary of Elan acquired in 1996, for the years ended December 31, 2011, December 31, 2012 and December 31, 2013. We are also involved in litigation with Irish Revenue for the years ended December 31, 2012 and December 31, 2013.

On August 22, 2019, we received a draft NOPA from the IRS with respect to our fiscal tax years ended June 28, 2014 and June 27, 2015, relating to the deductibility of interest on \$7.5 billion in debts owed to Perrigo Company plc by Perrigo Company, a Michigan corporation and wholly-owned indirect subsidiary of Perrigo Company plc. The debts were incurred in connection with the Elan merger transaction in 2013. The draft NOPA would cap the interest rate on the debts for U.S. federal tax purposes at 130.0% of the Applicable Federal Rate (a blended rate reduction of 4.0% per annum from the rates agreed to by the parties), on the stated ground that the loans were not negotiated on an arms'-length basis. As a result of the proposed interest rate reduction, the draft NOPA proposes a reduction in gross interest expense of approximately \$480.0 million for fiscal years 2014 and 2015. If the IRS were to prevail in its proposed adjustment, we estimate an increase in tax expense for such fiscal years of approximately \$170.0 million, excluding interest and penalties. In addition, we would expect the IRS to seek similar adjustments for the period from June 28, 2015 through December 31, 2019. If those further adjustments were sustained, based on our preliminary calculations and subject to further analysis, our current best estimate is that the additional tax expense would not exceed \$200.0 million, excluding interest and penalties, for the period June 28, 2015 through December 31, 2019. We do not expect any similar adjustments beyond December 31, 2019 as proposed regulations, issued under section 267A of the Internal Revenue Code, would eliminate the deductibility of interest on this debt. We strongly disagree with the IRS position and will pursue all available administrative and judicial remedies. No payment of any amount related to the proposed adjustments is required to be made, if at all, until all applicable proceedings have been completed.

Following receipt of the draft NOPA, Perrigo provided the IRS with a detailed written response on September 20, 2019. That submission included an analysis by external advisors that supported the original interest rates as being consistent with arms'-length rates for comparable debt and explained why the exam team's analyses

and conclusions were both factually and legally misguided. Based on discussions with the IRS, we had believed that the IRS staff would take our submission into account and meet with us to discuss whether this issue could be resolved at the examination level. However, in the weeks following such discussions, IRS staff advised that they would not respond in detail to our September submission or negotiate the interest rate issue prior to issuing a final NOPA consistent with the draft NOPA. Accordingly, we currently expect that we will receive a final NOPA regarding this matter that proposes substantially the same adjustments described in the draft NOPA.

On April 26, 2019, we received a revised NOPA from the IRS regarding transfer pricing positions related to the IRS audit of Athena for the years ended December 31, 2011, 2012 and 2013. The NOPA carries forward the IRS's theory from its 2017 draft NOPA that when Elan took over the future funding of Athena's in-process research and development after acquiring Athena in 1996, Elan should have paid a substantially higher royalty rate for the right to exploit Athena's intellectual property, rather than rates based on transfer pricing documentation prepared by Elan's external tax advisors. The NOPA proposes a payment of \$843.0 million, which represents additional tax and a 40.0% penalty. This amount excludes consideration of offsetting tax attributes and potentially material interest. We strongly disagree with the IRS position and will pursue all available administrative and judicial remedies, including potentially those available under the U.S. - Ireland Income Tax Treaty to alleviate double taxation. No payment of the additional amounts is required until the matter is resolved administratively, judicially, or through treaty negotiation.

On October 30, 2018, we received an audit finding letter from the Irish Office of the Revenue Commissioners ("Irish Revenue") for the years ended December 31, 2012 and December 31, 2013. The audit finding letter relates to the tax treatment of the 2013 sale of the Tysabri® intellectual property and other assets related to Tysabri® to Biogen Idec from Elan Pharma. The consideration paid by Biogen to Elan Pharma took the form of an upfront payment and future contingent royalty payments. Irish Revenue issued a Notice of Amended Assessment ("NoA") on November 29, 2018, which assesses an Irish corporation tax liability against Elan Pharma in the amount of €1,636 million, not including interest or any applicable penalties.

We disagree with this assessment and believe that the NoA is without merit and incorrect as a matter of law. We filed an appeal of the NoA on December 27, 2018 and will pursue all available administrative and judicial avenues as may be necessary or appropriate. In connection with that, Elan Pharma was granted leave by the Irish High Court on February 25, 2019 to seek judicial review of the issuance of the NoA by Irish Revenue. The judicial review filing is based on our belief that Elan Pharma's legitimate expectations as a taxpayer have been breached, not on the merits of the NoA itself. The High Court has scheduled a hearing in this judicial review proceeding in April 2020, and we would expect a decision in this matter in the second half of 2020. If we are ultimately successful in the judicial review proceedings, the NoA will be invalidated and Irish Revenue will not be able to re-issue the NoA. The proceedings before the Tax Appeals Commission have been stayed until a decision on the judicial review application has been made. If for any reason the judicial review proceedings are ultimately unsuccessful in establishing that Irish Revenue's issuance of the NoA breaches our legitimate expectations, Elan Pharma will reactivate its appeal to challenge the merits of the NoA before the Tax Appeals Commission.

We regularly assess the likelihood of adverse outcomes resulting from tax examinations to determine the adequacy of our tax reserves. We believe that, based on a review of the relevant facts and circumstances, this matter will not result in a material impact on our consolidated financial position, results of operations or cash flows. However, while we believe our position to be correct, there can be no assurance of an ultimate favorable outcome, and if the matter is ultimately resolved unfavorably it would have a material adverse impact on us, including on liquidity and capital resources. We will consider the financial statement impact of any additional facts as they become available.

In addition, going forward, uncertainty regarding the future outcome of tax disputes such as the NoA or draft or final NOPA may have an adverse impact on our strategy and the results of such tax disputes may have an adverse impact on our financial condition and liquidity.

At this time, we cannot predict the outcome of any audit or related litigation. Unfavorable developments in or resolutions of matters such as those discussed above could, individually or in the aggregate, have a material impact on our Consolidated Financial Statements in future periods (refer to [Item 8, Note 15](#) for further information related to uncertain tax positions and ongoing tax audits and [Item 8, Note 17](#) for further information related to legal proceedings). In addition, an adverse result with respect to any of these matters could ultimately require the use of

corporate assets to pay assessments and related interest, penalties or other amounts, and any such use of corporate assets would limit the assets available for other corporate purposes.

The U.S. Internal Revenue Service ("IRS") may not agree with the conclusion that we are treated as a foreign corporation for U.S. federal tax purposes.

Although we are incorporated in Ireland, the IRS may assert that we should be treated as a U.S. corporation (and, therefore, a U.S. tax resident) for U.S. federal tax purposes pursuant to section 7874 of the U.S. Internal Revenue Code of 1986, as amended ("Code"). For U.S. federal tax purposes, a corporation generally is considered a tax resident in the jurisdiction of its organization or incorporation. Because we are an Irish incorporated entity, we would generally be classified as a foreign corporation (and, therefore, a non-U.S. tax resident) under these rules. Section 7874 of the Code provides an exception under which a foreign incorporated entity may, in certain circumstances, be treated as a U.S. corporation for U.S. federal tax purposes.

For Perrigo Company plc to be treated as a foreign corporation for U.S. federal tax purposes under section 7874 of the Code, either (i) the former stockholders of Perrigo Company must own (within the meaning of section 7874 of the Code) less than 80% (by both vote and value) of our stock by reason of holding shares in Perrigo Company (the "ownership test") as of the closing of the Elan acquisition or (ii) we must have substantial business activities in Ireland after the Elan acquisition (taking into account the activities of our expanded affiliated group).

Upon our acquisition of Elan, Perrigo Company stockholders held 71% (by both vote and value) of our shares. As a result, we believe that under current law, we should be treated as a foreign corporation for U.S. federal tax purposes. However, we cannot assure that the IRS will agree with our position that the ownership test is satisfied. There is limited guidance regarding the section 7874 provisions, including the application of the ownership test. An unfavorable determination on Perrigo Company plc's treatment as a foreign corporation under section 7874 of the Code could have a material impact on our Consolidated Financial Statements in future periods.

Based on the limited guidance available, we currently expect that Section 7874 of the Code likely will limit our and our U.S. affiliates' ability to use their U.S. tax attributes, such as net operating losses, to offset certain U.S. taxable income, if any, generated by the Elan acquisition or certain specified transactions for a period of time following the Elan acquisition (refer to [Item 8. Note 15](#)).

Changes to tax laws could have a material adverse effect on our results of operations and the ability to utilize cash in a tax efficient manner.

We believe that under current law, we should be treated as a foreign corporation for U.S. federal tax purposes. However, any of the following could adversely affect our status as a foreign corporation for U.S. federal tax purposes:

- Changes to the inversion rules in section 7874 of the Code, the IRS Treasury regulations promulgated thereunder, or other IRS guidance; and
- Legislative proposals aimed at expanding the scope of U.S. corporate tax residence.

Since our acquisition of Elan in 2013, the United States Treasury ("Treasury") and the IRS have issued a number of Notices and proposed, temporary, and final regulations, including most recently, on July 12, 2018, new final regulations addressing various aspects of section 7874 and related provisions, including guidance to address certain specific post-inversion transactions. All the Notices and regulations are either effective for dates after the Elan acquisition occurred or do not provide guidance that we believe would have a material impact on the treatment of our status as a foreign corporation.

The Organization for Economic Co-operation and Development ("OECD"), which represents a coalition of member countries, has recommended changes to numerous long-standing tax principles relating to Base Erosion and Profit Shifting ("BEPS"). These changes are being adopted and implemented by many of the countries in which we do business and may increase our tax expense in these countries. For example, Ireland implemented "controlled foreign corporation legislation" effective January 1, 2019 as required by the EU Anti-Tax Avoidance Directive ("ATAD") and effective January 1, 2020 has implemented "anti-hybrid legislation." Such OECD initiatives, changes

in domestic legislation, introduction of EU Directives and general global tax reform are actively monitored to ensure we adhere to all laws and regulations in all jurisdictions in which we operate.

On December 22, 2017, the U.S. enacted the U.S. Tax Act. The U.S. Tax Act includes several significant changes to existing U.S. tax laws that impact us. These changes include a corporate income tax rate reduction from 35% to 21%, full expensing of fixed assets placed in service in 2018 and the elimination or reduction of certain U.S. deductions and credits, including limitations on the deductibility of interest expense and executive compensation. The U.S. Tax Act also transitions international taxation from a worldwide system to a modified territorial system. This modified territorial system includes, among other items, base erosion prevention measures which have the effect of subjecting certain earnings of our U.S. owned foreign corporations to U.S. taxation as global intangible low-taxed income ("GILTI") and the establishment of a minimum tax on certain payments from our U.S. subsidiaries to related foreign persons as base erosion and anti-abuse tax ("BEAT"). These changes became effective in 2018. The U.S. Tax Act also includes a one-time mandatory deemed repatriation tax on accumulated U.S. owned foreign corporations' previously untaxed foreign earnings ("Transition Toll Tax"). The Transition Toll Tax can be paid over an eight-year period starting in 2018 and will not accrue interest. Based on the 2017 U.S. federal income tax return filed by the Company, the Transition Toll Tax was paid in full with the 2017 U.S. federal income tax return. During 2018, Treasury and the IRS issued various forms of guidance, including notices of proposed rule making and proposed Treasury regulations, implementing and clarifying aspects of the U.S. Tax Act and other related topics, such as:

- Transition Toll Tax;
- BEAT;
- GILTI;
- Foreign tax credit computations;
- The full expensing of fixed assets placed in service in 2018;
- Interest expense limitations under Section 163(j);
- Deductibility of interest and/or royalty payments made by U.S. corporate taxpayers to foreign related parties in so-called "hybrid mismatch" arrangements under Section 267A; and
- The limitation of deductions for key executive compensation as determined under Section 162(m).

During the year ended December 31, 2018, we considered and evaluated Treasury and IRS guidance issued as described above and reflected certain changes in our income tax provision for 2018. In 2019, Treasury and the IRS issued final tax regulations ("Final Regulations") on certain code sections that were introduced by, or changed as a result of, the U.S. Tax Act. The Final Regulations issued in 2019 did not result in material changes to the tax effect recorded in prior periods when proposed regulations were issued. We will continue to record the tax effects of any further proposed regulations in the quarters in which they are issued.

Our preliminary estimate of the impact of the U.S. Tax Act (including the Transition Toll Tax) was recorded as of December 31, 2017 and was subject to the finalization of management's analysis related to certain matters, such as developing interpretations of the provisions of the U.S. Tax Act, changes to certain estimates and amounts related to the earnings and profits of certain U.S. owned foreign subsidiaries and the filing of our tax returns. U.S. Treasury regulations, administrative interpretations or court decisions interpreting the U.S. Tax Act required further adjustments and changes in our 2017 estimates, which did not have a material adverse effect on our business, results of operations or financial conditions. The final determination of the impact of the U.S. Tax Act (including the Transition Toll Tax) was completed in 2018, as required by SAB 118 (refer to [Item 8, Note 15](#)).

Any of these changes could have a prospective or retroactive application to us, our shareholders, and affiliates, and could adversely affect us by changing our effective tax rate and limiting our ability to utilize cash in a tax efficient manner.

Our effective tax rate or cash tax payment requirements may change in the future, which could adversely impact our future results from operations.

A number of factors may adversely impact our future effective tax rate or cash tax payment requirements, which may impact our future results and cash flows from operations (refer to [Item 8, Note 15](#)). These factors include, but are not limited to:

- Changes to tax laws or the interpretation of such tax laws (including additional proposals for fundamental international tax reform in a number of jurisdictions globally);
- Income tax rate changes by governments;
- The jurisdictions in which our profits are determined to be earned and taxed;
- Changes in the valuation of our deferred tax assets and liabilities;
- Adjustments to estimated taxes upon finalization of various tax returns;
- Adjustments to our interpretation of transfer pricing standards, treatment or characterization of intercompany transactions, changes in available tax credits, grants and other incentives;
- Changes in stock-based compensation expense;
- Changes in U.S. generally accepted accounting principles;
- Expiration or the inability to renew tax rulings or tax holiday incentives; and
- Divestitures of current operations.

Capital and Liquidity Risks

Our indebtedness could adversely affect our ability to implement our strategic initiatives.

We anticipate that cash, cash equivalents, cash flows from operations, and borrowings available under our credit facilities will substantially fund working capital and capital expenditures. Our business requires continuous capital investments, and there can be no assurance that financial capital will always be available on favorable terms or at all. Additionally, our leverage and debt service obligations could adversely affect the business. At December 31, 2019, our total indebtedness outstanding was \$3.4 billion.

- Our senior credit facilities, the agreements governing our senior notes, and agreements governing our other indebtedness contain a number of restrictions and covenants that limit our ability to make distributions or other payments to our investors and creditors unless certain financial tests or other criteria are satisfied.
- We also must comply with certain specified financial ratios and tests. These restrictions could affect our ability to operate our business and may limit our ability to take advantage of potential business opportunities, such as acquisitions. If we do not comply with the covenants and restrictions contained in our senior credit facilities, agreements governing our senior notes, and agreements governing our other indebtedness, we could be in default under those agreements, and the debt, together with accrued interest, could then be declared immediately due and payable.
- Any default under our senior credit facilities or agreements governing our senior notes or other indebtedness could lead to an acceleration of debt under other debt instruments that contain cross-acceleration or cross-default provisions. If our indebtedness is accelerated, there can be no assurance that we would be able to repay or refinance our debt or obtain sufficient new financing.
- Downgrades to our credit ratings may limit our access to capital and materially increase borrowing costs on current or future financing, including via trade payables with vendors. Customers' inclination to purchase goods from us may also be affected by the publicity associated with deterioration of our credit ratings.
- There are various maturity dates associated with our credit facilities, senior notes, and other debt facilities. There is no assurance that cash, future borrowings or equity financing will be available for the payment or refinancing of our indebtedness. Further, there is no assurance that future refinancing or renegotiation of our senior credit facilities, senior notes or other debt facilities, or additional agreements will not have materially different or more stringent terms (refer to [Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations](#)).

We cannot guarantee that we will buy back our ordinary shares pursuant to our announced share repurchase plan or that our share repurchase plan will enhance long-term shareholder value.

Following the expiration of our 2015 share repurchase plan authorization (the "2015 Authorization"), in October 2018 our Board of Directors authorized up to \$1.0 billion of share repurchases with no expiration date (the "2018 Authorization"), subject to the Board of Directors' approval of the pricing parameters and amount that may be repurchased under each specific share repurchase program. Through December 31, 2018, we repurchased a total of 7.8 million ordinary shares through the prior 2015 Authorization. The specific timing and amount of buybacks under the 2018 Authorization, if any, will depend upon several factors, including market and business conditions, the trading price of our ordinary shares, the nature of other investment opportunities and the availability of distributable reserves of Perrigo Company plc. Buybacks of our ordinary shares pursuant to our share repurchase plan could affect the market price of our ordinary shares or increase their volatility. Additionally, our share repurchase plan could diminish our cash reserves, which may impact our ability to finance future growth and to pursue possible future strategic opportunities and acquisitions. Although our share repurchase plan is intended to enhance long-term shareholder value, there is no assurance that it will do so, and short-term share price fluctuations could reduce the plan's effectiveness.

Any additional shares we may issue could dilute your ownership in the Company.

- Under Irish law, our authorized share capital can be increased by an ordinary resolution of our shareholders, and the directors may issue new ordinary or preferred shares up to a maximum amount equal to the authorized but unissued share capital, without shareholder approval, once authorized to do so by the articles of association or by an ordinary resolution of our shareholders.
- Subject to specified exceptions, Irish law grants statutory preemption rights to existing shareholders to subscribe for new issuances of shares for cash, but allows shareholders to authorize the waiver of the statutory preemption rights either in our articles of association or by way of a special resolution. Such disapplication of these preemption rights can either be generally applicable or be in respect of a particular allotment of shares.
- At our annual general meeting of shareholders in April 2019, our shareholders authorized our Board of Directors to issue up to a maximum of 33% of our issued ordinary capital on that date for a period of 18 months from the passing of the resolution. At the annual general meeting, our shareholders also authorized our Board of Directors to issue ordinary shares on a nonpreemptive basis in the following circumstances: (i) an issuance of shares in connection with any rights issuance and (ii) an issuance of shares for cash, if the issuance is limited to up to 5% of the Company's issued ordinary share capital (with the possibility of issuing an additional 5% of the Company's issued ordinary share capital provided the Company uses it only in connection with an acquisition or a specified capital investment that is announced contemporaneously with the issuance, or which has taken place in the preceding six-month period and is disclosed in the announcement of the issuance), bringing the total acceptable limit to 10% of the Company's issued ordinary share capital. Once these authorizations expire, we cannot provide any assurance that they will be renewed by the shareholders at subsequent annual general meetings, which could limit our ability to issue equity and thereby adversely affect the holders of our securities.

We are incorporated in Ireland; Irish law differs from the laws in effect in the United States and may afford less protection to, or otherwise adversely affect, our shareholders.

As an Irish company, we are governed by the Irish Companies Act 2014 (the "Act"). The Act differs in some material respects from laws generally applicable to U.S. corporations and shareholders, including the provisions relating to interested directors, mergers, amalgamations and acquisitions, takeovers, shareholder lawsuits, and indemnification of directors.

- Under Irish law, the duties of directors and officers of a company are generally owed to the company only. As a result, shareholders of Irish companies do not have the right to bring an action against the directors or officers of a company, except in limited circumstances.
- Depending on the circumstances, shareholders may be subject to different or additional tax consequences under Irish law as a result of the acquisition, ownership and/or disposition of ordinary shares, including, but not limited to, Irish stamp duty, dividend withholding tax, Irish income tax, and capital acquisitions tax.

- There is no treaty between Ireland and the U.S. providing for the reciprocal enforcement of foreign judgments. Before a foreign judgment would be deemed enforceable in Ireland, the judgment must be (i) for a definite sum, (ii) provided by a court of competent jurisdiction and (iii) final and conclusive. An Irish High Court may exercise its right to refuse to recognize and enforce a foreign judgment if the foreign judgment was obtained by fraud, if it violated Irish public policy, if it is in breach of natural justice, or if it is irreconcilable with an earlier judgment.
- An Irish High Court may stay proceedings if concurrent proceedings are being brought elsewhere. Judgments of U.S. courts of liabilities predicated upon U.S. federal securities laws may not be enforced by Irish High Courts if deemed to be contrary to public policy in Ireland.
- It could be more difficult for us to obtain shareholder approval for a merger or negotiated transaction than if we were a U.S. company because the shareholder approval requirements for certain types of transactions differ, and in some cases are greater, under Irish law.

Irish law differs from the laws in effect in the U.S. with respect to defending unwanted takeover proposals and may give our Board of Directors less ability to control negotiations with hostile offerors.

We are subject to the Irish Takeover Panel Act, 1997, Takeover Rules, 2013. Under those Irish Takeover Rules, the Board of Directors is not permitted to take any action that might frustrate an offer for our ordinary shares once the Board of Directors has received an approach that may lead to an offer or has reason to believe that such an offer is or may be imminent, subject to certain exceptions. Potentially frustrating actions such as (i) the issuance of ordinary shares, options or convertible securities, (ii) material acquisitions or disposals, (iii) entering into contracts other than in the ordinary course of business, or (iv) any action, other than seeking alternative offers, which may result in frustration of an offer, are prohibited during the course of an offer or at any earlier time during which the Board of Directors has reason to believe an offer is or may be imminent. These provisions may give the Board of Directors less ability to control negotiations with hostile offerors and protect the interests of holders of ordinary shares than would be the case for a corporation incorporated in a jurisdiction of the United States.

We may be limited in our ability to pay dividends or repurchase shares in the future.

A number of factors may limit our ability to pay dividends in the future, including:

- Our ability to receive cash dividends and distributions from our subsidiaries;
- Compliance with applicable laws and debt covenants;
- Our financial condition, results of operations, capital requirements, general business conditions, and other factors that our Board of Directors may deem relevant; and
- The availability of Perrigo Company plc's distributable reserves, being profits of the company available for distribution to shareholders.

Under Irish law, distributable reserves are the accumulated realized profits so far as not previously utilized by distribution or capitalization, less accumulated realized losses so far as not previously written off in a reduction or a reorganization of capital duly made. In addition, no distribution or dividend may be made if, at the time of the distribution or dividend, Perrigo Company plc's net assets are not, or would not be after giving effect to such distribution or dividend, equal to, or in excess of, the aggregate of Perrigo Company plc's called-up share capital plus undistributable reserves.

While we currently expect to continue paying dividends, significant changes in our business or financial condition such as asset impairments, sustained operating losses and the selling of assets, could impact the amount of distributable reserves available to us. We could seek to create additional distributable reserves through a reduction in Perrigo Company plc's share premium, which would require 75% shareholder approval and the approval of the Irish High Court. The Irish High Court's approval is a matter for the discretion of the court, and there can be no assurances that such approval would be obtained. In the event that additional distributable reserves are not created in this way, dividends, share repurchases or other distributions would generally not be permitted under Irish law until such time as Perrigo Company plc has created sufficient distributable reserves in our audited statutory financial statements as a result of its business activities.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our world headquarters is located in Dublin, Ireland, and our North American base of operations is located in Allegan, Michigan. We manufacture products at 22 worldwide locations and have R&D, logistics, and office support facilities in many of the regions in which we operate. We own approximately 77% of our facilities and lease the remainder. Our primary facilities by geographic area were as follows at December 31, 2019:

Country	Number of Facilities	Segment(s) Supported
Ireland	2	CSCA, CSCI, RX
United States	48	CSCA, CSCI, RX
Mexico	10	CSCA
United Kingdom	8	CSCI
France	6	CSCI
Australia	4	CSCI
Belgium	4	CSCI
Austria	3	CSCI
Israel	3	CSCA, RX
India	3	CSCA, CSCI
Germany	2	CSCI

We believe that our production facilities are adequate to support the business, and our property and equipment are well maintained. Our manufacturing plants are suitable for their intended purposes and have capacities for current and near term projected needs of our existing products. As previously announced, we are making strategic investments in certain of our manufacturing plants to enhance our manufacturing capabilities.

ITEM 3. LEGAL PROCEEDINGS

Information regarding our current legal proceedings is presented in [Item 8. Note 17](#).

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

ADDITIONAL ITEM. INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Our executive officers and their ages and positions as of February 21, 2020 were:

	Title and Business Experience	Age
Svend Andersen	Mr. Andersen was named Executive Vice President and President, Consumer Self-Care International in February 2017. Prior to joining Perrigo in May 2016, Mr. Andersen served as Executive Vice President - Europe for LEO-Pharma from December 2015 to May 2016. Prior to that, he was Regional President and Corporate officer at Hospira, Inc.'s Europe, Middle East and Africa ("EMEA") business for five years, was Executive Vice President responsible for the Western European division's pharmaceuticals, generics, OTC and hospital products businesses at Actavis from 2008 to 2015 including leading Alpharma's EMEA businesses prior to its acquisition by Actavis, and prior to that, spent 10 years with Ferrosan (A Novo Nordisk Subsidiary) specialized in OTC and consumer health products as Vice President for Global Commercial Operations.	58
James E. Dillard III	James E. Dillard III was named Executive Vice President and Chief Scientific Officer in January 2019. Mr. Dillard joined Perrigo from Altria Group, Inc., where he served as Senior Vice President, Research, Development and Sciences and Chief Innovation Officer from January 2009 to May 2018. During his tenure with Altria Group, Mr. Dillard led the creation of the Regulatory Affairs function in 2009 and also served as Chief Innovation Officer for Altria Client Services and Senior Vice President of Research, Development & Regulatory Affairs for Altria Group. He held science and technology leadership roles with U.S. Smokeless Tobacco Company, an Altria Group Inc. operating company, from 2001 to 2009. Mr. Dillard worked for the U.S. Food and Drug Administration between 1987 and 2001 as Director of the Division of Cardiovascular and Respiratory Devices, as well as in various leadership roles in the Center for Devices and Radiological Health and the Office of Device Evaluation.	56
Thomas M. Farrington	Mr. Farrington was named Executive Vice President and Chief Information Officer in November 2015. He formerly served as Senior Vice President and Chief Information Officer from October 2006 to November 2015.	62
Ronald C. Janish	Mr. Janish was named Chief Transformation Officer in January 2019 and Executive Vice President of Global Operations and Supply Chain in October 2015. He served as Senior Vice President of International and Rx Operations from 2012 until 2015 and as Managing Director of Perrigo's Australian operations from 2010 to 2012. Previously, he held Senior Vice President roles for Perrigo in International Market Development, China Business Development and Global Procurement.	54
Murray S. Kessler	Mr. Kessler was appointed President, Chief Executive Officer and Board Member of Perrigo Company plc, effective October 8, 2018. Before joining Perrigo, Mr. Kessler served as the Chairman of the Board of Directors, President and CEO of Lorillard, Inc. (2010-2015). He served as Vice Chair of Altria, Inc. (2009) and President and CEO of UST, Inc. (2000-2009), a wholly owned subsidiary. Previous to his time at UST, Mr. Kessler had over 18 years of consumer packaged goods experience with companies including Vlasic Foods International, Campbell Soup and The Clorox Company. Since 2015, Mr. Kessler has served as voluntary President of the United States Equestrian Federation, a non-profit national governing body.	60
Todd W. Kingma	Mr. Kingma was named Executive Vice President, General Counsel and Secretary in May 2006. He served as Vice President, General Counsel and Secretary from August 2003 to May 2006.	60
Sharon Kochan	Mr. Kochan was named Executive Vice President and President, RX Pharmaceuticals in October 2018. He served as Executive Vice President and President, Branded Consumer Healthcare International from February 2017 to October 2018. He served as Executive Vice President and General Manager, Consumer Healthcare International from August 2012 to February 2017. He served as Executive Vice President, General Manager of Prescription Pharmaceuticals from March 2007 to July 2012 and as Senior Vice President of Business Development and Strategy from March 2005 to March 2007. Mr. Kochan was Vice President, Business Development of Agis Industries (1983) Ltd. from July 2001 until the acquisition of Agis by the Company in March 2005.	51
Jeffrey R. Needham	Mr. Needham was named Executive Vice President and President of Consumer Self-Care Americas in October 2009. He served as Senior Vice President of Commercial Business Development for Consumer Healthcare from March 2005 through October 2009. Previously, he served as Senior Vice President of International from November 2004 to March 2005. He served as Managing Director of Perrigo's U.K. operations from May 2002 to November 2004 and as Vice President of Marketing from 1993 to 2002.	63
Grainne Quinn	Dr. Quinn was named Executive Vice President in July 2016 and has served as Chief Medical Officer since November 2015. Prior to that she served as Vice President and Head of Global Patient Safety from January 2014 until November 2015. Dr. Quinn was Vice President and Head of Global Pharmacovigilance and Risk Management for Elan from April 2009 until December 2013 when the Company acquired Elan.	50

	Title and Business Experience	Age
Raymond P. Silcock	Mr. Silcock was named Executive Vice President and Chief Financial Officer in March 2019. Prior to joining Perrigo, Mr. Silcock served as CFO at INW Holdings from 2018 to 2019 and as EVP and CFO of CTI Foods from 2016 to 2018. In March 2019, CTI Foods filed a voluntary petition under Chapter 11 of the U.S. Bankruptcy Code in U.S. Bankruptcy Court in Delaware. From 2013 until the company's sale in 2016, Mr. Silcock was EVP and CFO of Diamond Foods, Inc. and previously held CFO roles at UST, Inc., Swift & Co. and Cott Corporation. He also served on the board of Pinnacle Foods, Inc. from 2008 until the company was sold in 2018. His early career was highlighted by an 18-year tenure in positions of increasing responsibility at Campbell Soup Company. Mr. Silcock is a Fellow of the Chartered Institute of Management Accountants (UK).	69
Robert Willis	Mr. Willis was named Executive Vice President and Chief Human Resources Officer in March 2019 after serving as Vice President of Human Resources Global Businesses for nearly six years. Prior to joining Perrigo, Mr. Willis gained more than 20 years of experience in Human Resources leadership through roles with Fawaz Alhokair Group in the Middle East, GE Capital in the UK and Ireland, DoubleClick in North America and internationally, and Norkom Technologies in Europe and North America. He also was a Partner and Founding Member of the Black & White Group.	51

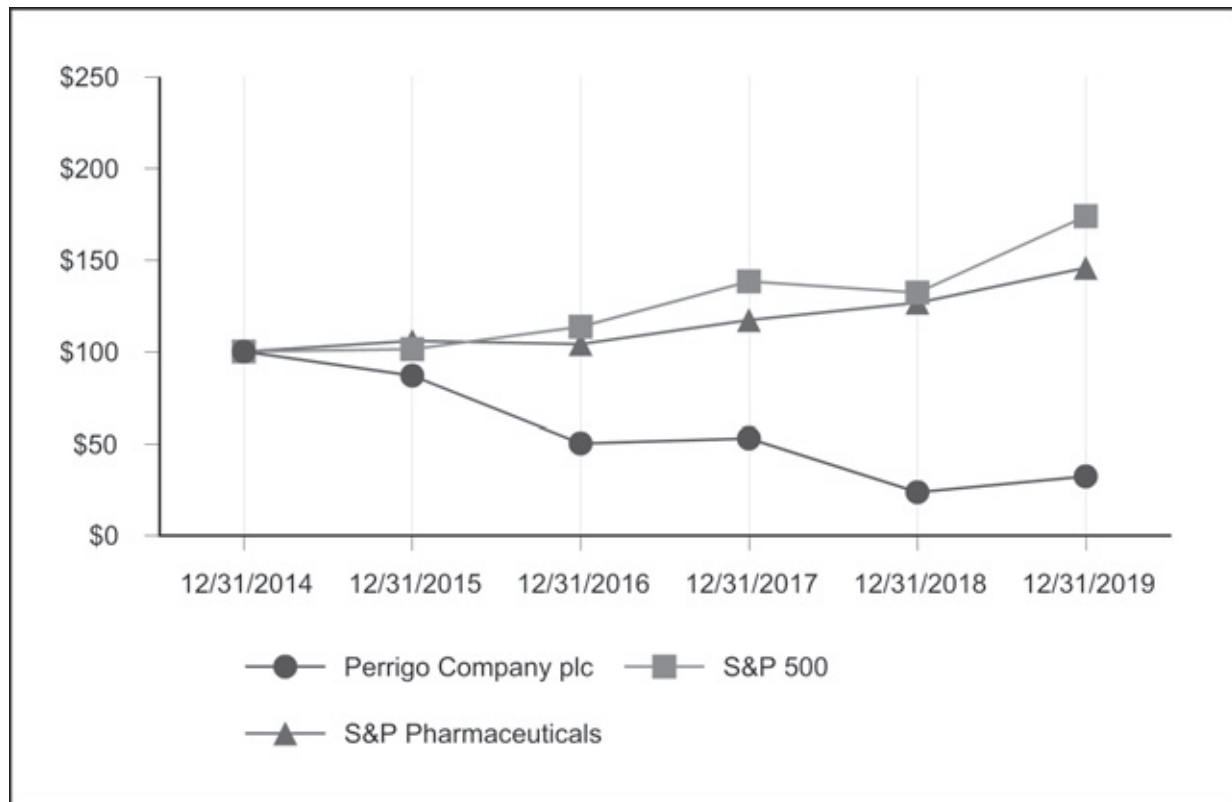
PART II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Prior to June 6, 2013, our common equity traded on the Nasdaq Global Select Market under the symbol PRGO. Since June 6, 2013, our common equity has traded on the New York Stock Exchange under the symbol PRGO. In association with the acquisition of Agis Industries (1983) Ltd., our common equity has been trading on the Tel Aviv Stock Exchange since March 16, 2005 under the same symbol. As of February 21, 2020, there were 1,435 record holders of our ordinary shares.

The graph below shows a comparison of our cumulative total return with the cumulative total returns for the S&P 500 Index and the S&P Pharmaceuticals Index. The graph assumes an investment of \$100 at the beginning of the period and the reinvestment of any dividends. Information in the graph is presented for the years ended December 31, 2014 through December 31, 2019.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
AMONG PERRIGO COMPANY PLC, THE S&P 500 INDEX, AND THE S&P PHARMACEUTICALS INDEX**



* \$100 invested on December 31, 2014 in stock or index - including reinvestment of dividends. Indexes calculated on month-end basis.

** Perrigo Company prior to December 31, 2013. Perrigo Company plc beginning December 18, 2013.

In October 2015, the Board of Directors approved a three-year share repurchase plan of up to \$2.0 billion. Following the expiration of our 2015 share repurchase plan authorization in October 2018, our Board of Directors authorized up to \$1.0 billion of share repurchases with no expiration date, subject to the Board of Directors' approval of the pricing parameters and amount that may be repurchased under each specific share repurchase program. We did not repurchase any shares during the year ended December 31, 2019. During the year ended December 31, 2018, we repurchased 5.1 million ordinary shares at an average repurchase price of \$77.93 per share, for a total of \$400.0 million. During the year ended December 31, 2017, we repurchased 2.7 million ordinary shares at an average repurchase price of \$71.72 per share, for a total of \$191.5 million.

ITEM 6. SELECTED FINANCIAL DATA

The Consolidated Statements of Operations data set forth below with respect to the years ended December 31, 2019, December 31, 2018, and December 31, 2017, and the Consolidated Balance Sheet data at December 31, 2019 and December 31, 2018 are derived from and are qualified by reference to the audited consolidated financial statements included in [Item 8](#) of this report and should be read in conjunction with those financial statements and notes. The Consolidated Statements of Operations data set forth below with respect to the year ended December 31, 2016 and the six months ended December 31, 2015 and December 27, 2014 and the Consolidated Balance Sheet data at December 31, 2017, December 31, 2016, December 31, 2015, and December 27, 2014 are derived from audited consolidated financial statements not included in this report.

(in millions, except per share amounts)	Year Ended				Six Months Ended	
	December 31, 2019 ⁽¹⁾	December 31, 2018	December 31, 2017	December 31, 2016 ⁽²⁾	December 31, 2015 ⁽³⁾	December 27, 2014 ⁽⁴⁾
Statements of Operations Data						
Net sales	\$ 4,837.4	\$ 4,731.7	\$ 4,946.2	\$ 5,280.6	\$ 2,632.2	\$ 1,844.7
Cost of sales	3,064.1	2,900.2	2,966.7	3,228.8	1,553.3	1,170.9
Gross profit	1,773.3	1,831.5	1,979.5	2,051.8	1,078.9	673.8
Operating expenses	1,568.5	1,595.0	1,381.3	4,051.5	1,011.3	384.1
Operating income (loss)	\$ 204.8	\$ 236.5	\$ 598.2	\$ (1,999.7)	\$ 67.6	\$ 289.7
Net income (loss)	\$ 146.1	\$ 131.0	\$ 119.6	\$ (4,012.8)	\$ 42.5	\$ 180.6
Diluted earnings (loss) from continuing operations per share	\$ 1.07	\$ 0.95	\$ 0.84	\$ (28.01)	\$ 0.29	\$ 1.34
Dividends declared per share	\$ 0.82	\$ 0.76	\$ 0.64	\$ 0.58	\$ 0.25	\$ 0.21

- (1) Includes the results of operations for assets acquired from Ranir Global Holdings, LLC for the six months ended December 31, 2019.
- (2) Includes the results of operations for assets acquired from Barr Laboratories, Inc. and assets acquired from Matawan Pharmaceuticals, LLC for the five months and eleven months and one week ended December 31, 2016, respectively.
- (3) Includes the results of operations of Naturwohl and the GSK, ScarAway[®], and Entocort[®] asset acquisitions for the two and a half months, three months, three months, and two weeks ended December 31, 2015, respectively.
- (4) Includes the results of operations for assets acquired from Lumara Health, Inc. for the two months ended December 27, 2014.

(in millions)	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2016	December 31, 2015	December 27, 2014
Balance Sheet Data						
Cash and cash equivalents	\$ 354.3	\$ 551.1	\$ 678.7	\$ 622.3	\$ 417.8	\$ 3,596.1
Total assets	\$ 11,301.4	\$ 10,983.4	\$ 11,628.8	\$ 13,870.1	\$ 19,349.6	\$ 16,508.4
Long-term debt, less current portion	\$ 3,365.8	\$ 3,052.2	\$ 3,270.8	\$ 5,224.5	\$ 4,971.6	\$ 4,439.4

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis ("MD&A") is intended to provide readers with an understanding of our financial condition, results of operations, and cash flows by focusing on changes in certain key measures from year to year. This MD&A is provided as a supplement to, and should be read in conjunction with, our Consolidated Financial Statements and accompanying Notes found in [Item 8](#) of this report. See also "[Cautionary Note Regarding Forward-Looking Statements](#)."

EXECUTIVE OVERVIEW

Perrigo Company plc was incorporated under the laws of Ireland on June 28, 2013 and became the successor registrant of Perrigo Company, a Michigan corporation, on December 18, 2013 in connection with the acquisition of Elan Corporation, plc ("Elan"). Unless the context requires otherwise, the terms "Perrigo," the "Company," "we," "our," "us," and similar pronouns used herein refer to Perrigo Company plc, its subsidiaries, and all predecessors of Perrigo Company plc and its subsidiaries.

We are dedicated to making lives better by bringing "Quality, Affordable Self-Care Products™" that consumers trust everywhere they are sold. We are a leading provider of over-the-counter ("OTC") health and wellness solutions that enhance individual well-being by empowering consumers to proactively prevent or treat conditions that can be self-managed. We are also a leading producer of generic prescription pharmaceutical topical products such as creams, lotions, gels, and nasal sprays.

Our vision is designed to support our shifting focus to our consumer branded and store brand portfolio and our global reach and the opportunities for growth we see ahead of us, while remaining loyal to our heritage. Our vision represents an evolution from healthcare to self-care, which takes advantage of a massive global trend and opens up a large number of adjacent growth opportunities. We define self-care as not just treating disease or helping individuals feel better after taking a product, but also maintaining and enhancing their overall health and wellness. In 2019, Perrigo's management and Board of Directors launched a three-year strategy to transform the Company into a consumer self-care leader, consistent with our vision. Significant progress was made in the first year of our transformation journey towards achieving the major components of management's transformation strategy, which consists of: reconfiguring the portfolio, delivering on base plans, creating repeatable platforms for growth, driving organizational effectiveness and capabilities, increasing productivity, allocating capital and delivering consistent and sustainable results in line with consumer-packaged goods peers.

Our fiscal year begins on January 1 and ends on December 31 of each year. We end our quarterly accounting periods on the Saturday closest to the end of the calendar quarter, with the fourth quarter ending on December 31 of each year.

Our Segments

During the three months ended March 30, 2019, we changed the composition of our operating and reporting segments. We moved our pharmaceuticals and diagnostic businesses in Israel from the Consumer Self-Care International segment to the Prescription Pharmaceuticals segment and we made certain adjustments to our allocations between segments. These changes were made to reflect changes in the way in which management makes operating decisions, allocates resources, and manages the growth and profitability of the Company.

Our new reporting and operating segments are as follows:

- **Consumer Self-Care Americas ("CSCA")**, formerly Consumer Healthcare Americas, comprises our consumer self-care business (OTC, contract manufacturing, infant formula, and oral self-care categories and our divested animal health category) in the U.S., Mexico and Canada.
- **Consumer Self-Care International ("CSCI")**, formerly Consumer Healthcare International, comprises our branded consumer self-care business primarily in Europe and Australia, our consumer-focused business in the United Kingdom and parts of Asia, and our liquid licensed products business in the United Kingdom.
- **Prescription Pharmaceuticals ("RX")** comprises our prescription pharmaceuticals business in the U.S. and our pharmaceuticals and diagnostic businesses in Israel, which were previously in our CSCI segment.

Our segments reflect the way in which our management makes operating decisions, allocates resources and manages the growth and profitability of the Company.

For information on each segment, our business environment, and competitive landscape, refer to [Item 1. Business](#). For results by segment and geographic locations see below "[Segment Results](#)" and [Item 8. Note 2 and Note 20](#).

Strategy

Our strategy is to make lives better by bringing "*Quality, Affordable Self-Care Products*"™ that consumers trust everywhere they are sold. We accomplish this by leveraging our global infrastructure to expand our product offerings, thereby providing new innovative products and product line extensions to existing consumers and servicing new consumers through entry into adjacent product categories or new geographies. We accomplish this strategy by investing in and continually improving all aspects of our five strategic pillars:

- High quality;
- Superior customer service;
- Leading innovation;
- Best cost; and
- Empowered people,

while remaining true to our three core values, Integrity - we do what is right; Respect - we demonstrate the value we hold for one another; and Responsibility - we hold ourselves accountable for our actions.

We utilize shared services and Research and Development ("R&D") centers of excellence in order to help ensure consistency in our processes around the world, and to maintain focus on our five strategic pillars.

We continually reinvest in our R&D pipeline and work with partners as necessary to strive to be first-to-market with new products. Our organic growth has been driven by successful new product launches in all our segments and expansion in new channels like e-commerce. Over time, we expect to continue to grow inorganically through expansion into adjacent products, product categories, and channels, as well as potentially through entry into new geographic markets. We evaluate potential acquisition targets using an internally developed 12-point scale, that is weighted towards accretive growth and correlated with shareholder value.

Competitive Advantage

Our consumer-facing business model combines the unique competencies of a fast-moving consumer goods company and a pharmaceutical manufacturing company with the supply chain breadth necessary to support customers in the markets we serve. These durable business model competencies align with our five strategic pillars and provide us a competitive advantage in the marketplace. We fully integrate quality in our operational systems across all products. Our ability to manage our supply chain complexity across multiple dosage forms, formulations, and stock-keeping units, as well as acquisitions, integrations, and hundreds of global partners provides value to our customers. Product development capacity and life cycle management are at the core of our operational investments. Globally we have 22 manufacturing plants that are all in good regulatory compliance standing and have systems and structures in place to guide our continued success. Our leadership team is fully engaged in aligning all our metrics and objectives around sustainable compliance with industry associations and regulatory agencies.

Among other things, we believe the following give us a competitive advantage and provide value to our customers:

- Leadership in first-to-market product development and product life cycle management;
- Turn-key regulatory and promotional capabilities;
- Management of supply chain complexity and utilizing economies of scale;
- Quality and cost effectiveness throughout the supply chain creating a sustainable, low-cost network;
- Deep understanding of consumer needs and customer strategies;
- Industry leading e-commerce support; and
- Expansive pan-European commercial infrastructure, brand-building capabilities, and a diverse product portfolio.

Product Categories

As we continue to transform to a consumer-focused, self-care company, we re-aligned our product categories in our CSCA and CSCI segments as of December 31, 2019. The re-alignment standardizes our categories and product level detail to provide consistency across segments. This transformative step will optimize the way in which management reports and evaluates our business (refer to [Item 1. Business - Our Segments](#) and [Item 8. Note 2](#)).

Recent Highlights

Year Ended December 31, 2019

- We previously announced a plan to separate our RX business, which, when completed, will enable us to focus on expanding our consumer-focused businesses. In 2019, we continued preparations related to our planned separation, which may include a possible sale, spin-off, merger or other form of separation. While we remain committed to transforming to a consumer-focused business, we have not committed to a specific date or form for the separation. In connection with the proposed separation, we have incurred significant preparation costs and will continue to incur costs that when completed will be in the range of \$45.0 million to \$80.0 million, excluding restructuring expenses and transaction costs, depending on the final timing and structure of the transaction.
- On July 8, 2019, we completed the sale of our animal health business to PetIQ for cash consideration of \$182.5 million, which resulted in a pre-tax gain of \$71.7 million recorded in Other (income) expense, net on the Consolidated Statements of Operations.
- On July 1, 2019, we acquired 100% of the outstanding equity interest in Ranir Global Holdings, LLC ("Ranir"), a privately-held leading global supplier of private label and branded oral self-care products. After post-closing adjustments, total cash consideration paid was \$747.7 million, net of \$11.5 million cash acquired. This transaction advances our transformation to a consumer-focused, self-care company while enhancing our position as a global leader in consumer self-care solutions.

Year Ended December 31, 2018

- During the year ended December 31, 2018, our divested financial asset Tysabri[®] met the 2018 global net sales threshold resulting in a \$170.1 million gain. We received the \$250.0 million royalty payment on February 22, 2019.
- During the year ended December 31, 2018, we repurchased \$400.0 million worth of shares as part of our authorized share repurchase plan.

RESULTS OF OPERATIONS

CONSOLIDATED

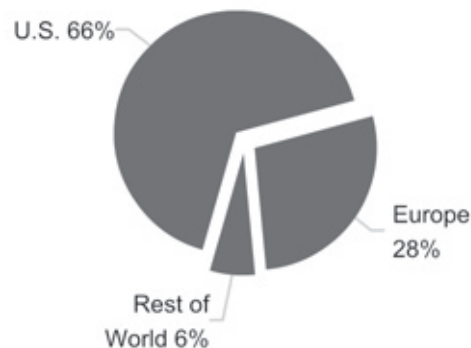
Consolidated Financial Results

<i>(in millions)</i>	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Net sales	\$ 4,837.4	\$ 4,731.7	\$ 4,946.2
Gross profit	\$ 1,773.3	\$ 1,831.5	\$ 1,979.5
Gross profit %	36.7%	38.7%	40.0%
Operating income	\$ 204.8	\$ 236.5	\$ 598.2
Operating income %	4.2%	5.0%	12.1%

Total Net Sales by Segment for the Year Ended December 31, 2019



Total Net Sales by Geography for the Year Ended December 31, 2019*



* Total net sales by geography is derived from the location of the entity that sells to a third party.

Year Ended December 31, 2019 vs. December 31, 2018

Net sales increased \$105.7 million, or 2%, due to:

- \$279.4 million, or a 6%, net increase due to new product sales of \$230.5 million, an increase of \$151.4 million due to our acquisition of Ranir, and an overall increase in demand for existing products, partially offset by normal levels of competition-driven pricing pressure primarily in our RX segment and a \$59.0 million decrease due to discontinued products; partially offset by
- \$173.7 million decrease due to:
 - \$86.4 million decrease due primarily to unfavorable Euro foreign currency translation;
 - \$50.2 million decrease due to our divested animal health business;
 - \$27.9 million decrease due to our exited infant foods business; and
 - \$9.2 million decrease due to the retail market withdrawal of Ranitidine products.

Operating income decreased \$31.7 million, or 13%, due to:

- \$58.2 million decrease in gross profit, or a 200 basis point decrease in gross profit as a percentage of net sales, due primarily to normal levels of competition-driven pricing pressure in our RX segment, the retail market withdrawal of Ranitidine products and unfavorable product mix; partially offset by

- \$26.5 million decrease in operating expenses due primarily to:
 - \$39.9 million decrease in impairment charges due primarily to the absence of \$221.9 million in impairment charges related to animal health goodwill and intangible assets and certain in-process research and development ("IPR&D") taken in the prior year period; partially offset by \$184.5 million in current year impairments primarily for our RX U.S. reporting unit goodwill and certain definite-lived intangible assets in our RX and CSCI segments; and
 - \$31.1 million decrease in R&D expenses primarily related to the absence of a \$50.0 million upfront license fee payment to enter into a license agreement with Merck Sharp & Dohme Corp in the prior year period, partially offset by current year innovation investments and pre-commercialization R&D costs for generic albuterol sulfate inhalation aerosol, the generic version of ProAir[®] HFA; partially offset by
 - \$17.8 million increase due to the absence of an insurance recovery received in the prior year; and
 - \$20.6 million increase in selling and administrative expenses due primarily to restored employee incentive compensation, increased acquisition and integration-related charges due to the Ranir acquisition; partially offset by favorable Euro foreign currency translation.

Year Ended December 31, 2018 vs. December 31, 2017

Net sales decreased \$214.5 million, or 4%, due primarily to:

- \$159.3 million, or a 3%, net decrease due primarily to normal levels of competition-driven pricing pressure primarily in our RX segment, discontinued products of \$66.4 million, and a decrease in volume in most segments, partially offset by \$169.8 million increase due to new product sales; and
- \$55.2 million decrease due to:
 - \$88.7 million decrease due to our divested Russian business and Israel API business; partially offset by
 - \$33.5 million increase due primarily to favorable Euro foreign currency translation.

Operating income decreased \$361.7 million, or 60%, due primarily to:

- \$148.0 million decrease in gross profit, or a 130 basis point decrease in gross profit as a percentage of net sales, due primarily to pricing pressure in our CSCA and RX segments, unfavorable product mix, and operating variances and increased input costs; partially offset by favorable pricing and benefits from continued insourcing initiatives in our CSCI segment; and
- \$213.7 million increase in operating expenses due primarily to:
 - \$176.9 million increase in impairment charges related primarily to animal health goodwill and intangible assets in 2018; partially offset by 2017 impairment charges related to certain definite-lived intangible assets and IPR&D;
 - \$50.9 million increase in R&D expense primarily related to a \$50.0 million upfront license fee payment to enter into a license agreement with Merck Sharp & Dohme Corp;
 - \$38.0 million increase due to the absence of a gain for the sale of certain ANDAs recognized in 2017, and the absence of a gain related to contingent consideration adjustments; partially offset by
 - \$32.4 million decrease in restructuring expense due primarily to the cost reduction initiatives and strategic organizational enhancements taken in 2017; and
 - \$17.8 million decrease due primarily to an insurance recovery.

Recent Developments

Internal Revenue Service Notices of Proposed Adjustments

On August 22, 2019, we received a draft Notice of Proposed Adjustment ("NOPA") from the IRS with respect to our fiscal tax years ended June 28, 2014 and June 27, 2015, relating to the deductibility of interest on \$7.5 billion in

debts owed to Perrigo Company plc by Perrigo Company, a Michigan corporation and wholly-owned indirect subsidiary of Perrigo Company, plc. The debts were incurred in connection with the Elan merger transaction in 2013. The draft NOPA would cap the interest rate on the debts for U.S. federal tax purposes at 130.0% of the Applicable Federal Rate (a blended rate reduction of 4.0% per annum from the rates agreed to by the parties), on the stated ground that the loans were not negotiated on an arms'-length basis. As a result of the proposed interest rate reduction, the draft NOPA proposes a reduction in gross interest expense of approximately \$480.0 million for fiscal years 2014 and 2015. If the IRS were to prevail in its proposed adjustment, we estimate an increase in tax expense for such fiscal years of approximately \$170.0 million, excluding interest and penalties. In addition, we would expect the IRS to seek similar adjustments for the period from June 28, 2015 through December 31, 2019. If those further adjustments were sustained, based on our preliminary calculations and subject to further analysis, our current best estimate is that the additional tax expense would not exceed \$200.0 million, excluding interest and penalties, for the period June 28, 2015 through December 31, 2019. We do not expect any similar adjustments beyond December 31, 2019 as proposed regulations, issued under section 267A of the Internal Revenue Code, would eliminate the deductibility of interest on this debt. We strongly disagree with the IRS position and will pursue all available administrative and judicial remedies. No payment of any amount related to the proposed adjustments is required to be made, if at all, until all applicable proceedings have been completed.

Following receipt of the draft NOPA, Perrigo provided the IRS with a detailed written response on September 20, 2019. That submission included an analysis by external advisors that supported the original interest rates as being consistent with arms'-length rates for comparable debt and explained why the exam team's analyses and conclusions were both factually and legally misguided. Based on discussions with the IRS, we had believed that the IRS staff would take our submission into account and meet with us to discuss whether this issue could be resolved at the examination level. However, in the weeks following such discussions, IRS staff advised that they would not respond in detail to our September submission or negotiate the interest rate issue prior to issuing a final NOPA consistent with the draft NOPA. Accordingly, we currently expect that we will receive a final NOPA regarding this matter that proposes substantially the same adjustments described in the draft NOPA. While we believe our position to be correct, there can be no assurance of an ultimate favorable outcome, and if the matter is resolved unfavorably it could have a material adverse impact on our liquidity and capital resources (refer to [Item 1A. Risk Factors - Tax Related Risks](#) and [Item 8. Note 15](#)).

On April 26, 2019, we received a revised NOPA from the IRS regarding transfer pricing positions related to the IRS audit of Athena for the years ended December 31, 2011, December 31, 2012 and December 31, 2013. The NOPA carries forward the IRS's theory from its 2017 draft NOPA that when Elan took over the future funding of Athena's in-process research and development after acquiring Athena in 1996, Elan should have paid a substantially higher royalty rate for the right to exploit Athena's intellectual property, rather than rates based on transfer pricing documentation prepared by Elan's external tax advisors. The NOPA proposes a payment of \$843.0 million, which represents additional tax and a 40.0% penalty. This amount excludes consideration of offsetting tax attributes and potentially material interest. We strongly disagree with the IRS position and will pursue all available administrative and judicial remedies, including potentially those available under the U.S. - Ireland Income Tax Treaty to alleviate double taxation. No payment of the additional amounts is required until the matter is resolved administratively, judicially, or through treaty negotiation. While we believe our position to be correct, there can be no assurance of an ultimate favorable outcome, and if the matter is resolved unfavorably it could have a material adverse impact on our liquidity and capital resources (refer to [Item 1A. Risk Factors - Tax Related Risks](#) and [Item 8. Note 15](#)).

Irish Tax Appeals Commission Notice of Amended Assessment

On October 30, 2018, we received an audit finding letter from the Irish Office of the Revenue Commissioners ("Irish Revenue") for the years ended December 31, 2012 and December 31, 2013. The audit finding letter relates to the tax treatment of the 2013 sale of the Tysabri[®] intellectual property and other assets related to Tysabri[®] to Biogen Idec from Elan Pharma. The consideration paid by Biogen to Elan Pharma took the form of an upfront payment and future contingent royalty payments. Irish Revenue issued a Notice of Amended Assessment ("NoA") on November 29, 2018, which assesses an Irish corporation tax liability against Elan Pharma in the amount of €1,636 million, not including interest or any applicable penalties.

We disagree with this assessment and believe that the NoA is without merit and incorrect as a matter of law. We filed an appeal of the NoA on December 27, 2018 and will pursue all available administrative and judicial avenues as may be necessary or appropriate. In connection with that, Elan Pharma was granted leave by the Irish High Court on February 25, 2019 to seek judicial review of the issuance of the NoA by Irish Revenue. The judicial review filing is based

on our belief that Elan Pharma's legitimate expectations as a taxpayer have been breached, not on the merits of the NoA itself. The High Court has scheduled a hearing in this judicial review proceeding in April 2020, and we would expect a decision in this matter in the second half of 2020. If we are ultimately successful in the judicial review proceedings, the NoA will be invalidated and Irish Revenue will not be able to re-issue the NoA. The proceedings before the Tax Appeals Commission have been stayed until a decision on the judicial review application has been made. If for any reason the judicial review proceedings are ultimately unsuccessful in establishing that Irish Revenue's issuance of the NoA breaches our legitimate expectations, Elan Pharma will reactivate its appeal to challenge the merits of the NoA before the Tax Appeals Commission. While we believe our position to be correct, there can be no assurance of an ultimate favorable outcome, and if the matter is resolved unfavorably it could have a material adverse impact on our liquidity and capital resources (refer to [Item 1A. Risk Factors - Tax Related Risks](#) and [Item 8. Note 15](#)).

Impairments

Throughout the years ended December 31, 2019, December 31, 2018, and December 31, 2017, we identified impairment indicators for various assets across our different segments, and therefore, we performed impairment testing. Below is a summary of the impairment charges recorded by segment (in millions):

	Year Ended			
	December 31, 2019			
	CSCA	CSCI ⁽¹⁾	RX ⁽²⁾	Total
Goodwill	\$ —	\$ —	\$ 109.2	\$ 109.2
Definite-lived intangible assets	—	9.7	59.8	69.5
IPR&D	4.1	0.1	1.6	5.8
	<u>\$ 4.1</u>	<u>\$ 9.8</u>	<u>\$ 170.6</u>	<u>\$ 184.5</u>

(1) Relates primarily to an intangible asset for certain pain relief products that we license from a third party.

(2) Relates primarily to our RX U.S. reporting unit goodwill, and definite-lived intangible assets for our generic clindamycin and benzoyl peroxide topical gel (generic equivalent to Benzacilin[®]), our Evamist[®] branded product, and a generic product.

	Year Ended		
	December 31, 2018		
	CSCA ⁽¹⁾	CSCI	Total
Goodwill	\$ 136.7	\$ —	\$ 136.7
Indefinite-lived intangible assets	27.7	—	27.7
Definite-lived intangible assets	48.9	0.7	49.6
Assets held-for-sale	0.6	1.1	1.7
IPR&D	8.7	—	8.7
	<u>\$ 222.6</u>	<u>\$ 1.8</u>	<u>\$ 224.4</u>

(1) Relates primarily to animal health and certain IPR&D.

	Year Ended				
	December 31, 2017				
	CSCA ⁽¹⁾	CSCI ⁽²⁾	RX ⁽³⁾	Other ⁽⁴⁾	Total
Definite-lived intangible assets	\$ —	\$ —	\$ 19.7	\$ —	\$ 19.7
Assets held-for-sale	—	3.7	—	3.3	7.0
IPR&D	—	1.1	11.6	—	12.7
Property, plant, and equipment	4.5	—	3.6	—	8.1
	<u>\$ 4.5</u>	<u>\$ 4.8</u>	<u>\$ 34.9</u>	<u>\$ 3.3</u>	<u>\$ 47.5</u>

(1) Relates to certain idle property, plant and equipment.

(2) Relates primarily to our Russian business, which was sold August 25, 2017.

(3) Relates primarily to intangible assets acquired through the Lumara Health, Inc. acquisition and IPR&D assets acquired in conjunction with certain Development-Stage Rx Products.

(4) Relates to our Israel API business, which was sold November 21, 2017.

CONSUMER SELF-CARE AMERICAS

Recent Developments

- On February 20, 2020, we entered into a definitive agreement to acquire the oral care assets of High Ridge Brands for cash of \$113.0 million. The transaction is expected to close in the first quarter of 2020 subject to bankruptcy court approval in connection with High Ridge Brands' Chapter 11 cases, as well as other customary closing conditions. This transaction, in combination with our existing children's oral self-care portfolio, provides a new platform for disruptive product innovation in the form of exclusive store and value brand programs that challenge current national brand oral care offerings.
- On January 3, 2020, we acquired Steripod[®], a leading toothbrush accessory brand and innovator in the toothbrush protector market, from Bonfit America Inc. The acquisition, which includes a portfolio of antibacterial toothbrush protectors, kids' toothbrush protectors and tongue cleaners, complements our current portfolio of oral self-care products, and leverages our manufacturing and marketing platform. Operating results attributable to the products will be included in our CSCA segment. Total consideration paid was \$24.7 million, subject to customary post-closing adjustments.
- On November 29, 2019, we acquired the branded OTC rights to Prevacid[®]24HR from GlaxoSmithKline for \$61.5 million. The acquisition of Prevacid[®]24HR expands our U.S. OTC presence with a leading brand in our digestive health product category.
- During the three months ended September 28, 2019, after regulatory bodies announced worldwide that Ranitidine may potentially contain N-nitrosodimethylamine ("NDMA"), a known environmental contaminant, we promptly began testing our externally-sourced Ranitidine API and Ranitidine-based products. On October 8, 2019, we halted shipments of the product based upon preliminary results. Based on the totality of data gathered, we made the decision to conduct a voluntary retail market withdrawal, which resulted in a decrease in net sales of \$7.4 million and a decrease in gross profit of \$15.5 million in our CSCA segment.
- On July 8, 2019, we completed the sale of our animal health business to PetIQ for cash consideration of \$182.5 million, which resulted in a pre-tax gain of \$71.7 million recorded in Other (income) expense, net on the Consolidated Statements of Operations.
- On July 1, 2019, we acquired Ranir, a privately-held leading global supplier of private label and branded oral self-care products, for \$747.7 million. This transaction advances our transformation to a consumer-focused, self-care company while enhancing our position as a global leader in consumer self-care solutions.
- On April 1, 2019, we purchased the ANDAs and other records and registrations of Budesonide Nasal Spray, a generic equivalent of Rhinocort Allergy[®] and Triamcinolone Nasal Spray, a generic equivalent of Nasacort Allergy[®], from Barr Laboratories, Inc., a subsidiary of Teva Pharmaceuticals, for a total of \$14.0 million in cash.

Segment Financial Results

Year Ended December 31, 2019 vs. December 31, 2018

<i>(in millions)</i>	Year Ended	
	December 31, 2019	December 31, 2018
Net sales	\$ 2,487.7	\$ 2,411.6
Gross profit	\$ 798.9	\$ 789.0
Gross profit %	32.1%	32.7%
Operating income	\$ 414.0	\$ 174.4
Operating income %	16.6%	7.2%

Net sales increased \$76.1 million, or 3%, due primarily to:

- \$162.1 million, or 7%, net increase due primarily to an increase of \$106.4 million due to our acquisition of Ranir, increased volume due to OTC category growth, market share gains from store brand competitors partly driven by \$36.2 million of new product sales, growth in OTC e-commerce, and increased OTC store brand penetration versus national brand, partially offset by lower infant formula contract pack sales as several branded customers made the strategic decision to exit the category, lower net sales in the Mexico business, and competition-driven pricing pressure; partially offset by
- \$85.5 million decrease due to:
 - \$50.2 million decrease due to our divested animal health business;
 - \$27.9 million decrease due to our exited foods business; and
 - \$7.4 million decrease due to the retail market withdrawal of Ranitidine products.

Operating income increased \$239.6 million, or 137%, due primarily to:

- \$9.9 million increase in gross profit due primarily to increased net sales as described above, but a 60 basis point decrease in gross profit as a percentage of net sales, due primarily to pricing pressures, the retail market withdrawal of Ranitidine products, and unfavorable product mix; and
- \$229.7 million decrease in operating expenses due primarily to:
 - \$218.4 million decrease in impairment charges due primarily to the absence of \$213.2 million in impairment charges related to animal health goodwill and intangible assets and a \$5.0 million decrease in certain IPR&D impairments; and
 - \$34.5 million decrease in R&D expense due primarily to the absence of a \$50.0 million upfront license fee payment to enter into a license agreement with Merck; partially offset by current year innovation investments; partially offset by
 - \$15.5 million increase in selling and administrative expenses due primarily to increased advertising and promotional spending to support product launches and eCommerce growth, an increase in employee-related expenses, and the acquisition of Ranir; and
 - \$7.1 million increase in other operating expenses due to an asset abandonment related to our operations in Vermont.

Year Ended December 31, 2018 vs. December 31, 2017

<i>(in millions)</i>	Year Ended	
	December 31, 2018	December 31, 2017
Net sales	\$ 2,411.6	\$ 2,429.9
Gross profit	\$ 789.0	\$ 843.7
Gross profit %	32.7%	34.7%
Operating income	\$ 174.4	\$ 470.9
Operating income %	7.2%	19.4%

Net sales decreased \$18.3 million, or 1%, due primarily to:

- \$14.9 million, or 1%, net decrease due to discontinued products of \$32.1 million and a decrease of existing product sales due to lost distribution and channel dynamics in our animal health category and normal levels of competition-driven pricing pressure, partially offset by a \$48.7 million increase due to new product sales; and
- \$3.4 million decrease due to unfavorable Mexican peso foreign currency translation.

Operating income decreased \$296.5 million, or 63%, due primarily to:

- \$54.7 million decrease in gross profit, or a 200 basis point decrease in gross profit as a percentage of net sales, due primarily to operating variances and increased input costs, lower sales in the higher margin animal health business and pricing pressure; and
- \$241.8 million increase in operating expenses due primarily to:
 - \$218.0 million increase in impairment charges due primarily to animal health goodwill and intangible assets; and
 - \$44.8 million increase in R&D expense due primarily to a \$50.0 million upfront license fee payment to enter into a license agreement with Merck; partially offset by
 - \$26.9 million decrease in restructuring expense related to the cost reduction initiatives taken in 2017.

CONSUMER SELF-CARE INTERNATIONAL

Recent Developments

- During the three months ended December 31, 2019, we identified impairment indicators related to certain pain relief products that we licensed from a third party and reported as a definite-lived intangible asset. The impairment indicators related to commercial launch delays and a decision by the licensor to not extend the license agreement upon expiration. We determined the asset was fully impaired and recorded an asset impairment of \$9.7 million.
- During the three months ended September 28, 2019, after regulatory bodies announced worldwide that Ranitidine may potentially contain NDMA, a known environmental contaminant, we promptly began testing our externally sourced Ranitidine API and Ranitidine-based products. On October 8, 2019, we halted shipments of the product based upon preliminary results. Based on the totality of data gathered, we made the decision to conduct a voluntary retail market withdrawal, which resulted in a decrease in net sales of \$1.8 million and a decrease in gross profit of \$2.9 million in our CSCI segment.
- On July 1, 2019, we acquired Ranir, a transaction that advances our transformation to a consumer-focused, self-care company while enhancing our position as a global leader in consumer self-care solutions. Ranir's non-U.S. operations are primarily in the United Kingdom, France, Germany, and China.

Segment Financial Results

Year Ended December 31, 2019 vs. December 31, 2018

<i>(in millions)</i>	Year Ended	
	December 31, 2019	December 31, 2018
Net sales	\$ 1,382.2	\$ 1,399.3
Gross profit	\$ 639.5	\$ 668.7
Gross profit %	46.3%	47.8%
Operating income	\$ 19.6	\$ 6.8
Operating income %	1.4%	0.5%

Net sales decreased \$17.1 million, or 1%, due primarily to:

- \$71.6 million, or 5%, net increase due to new product sales of \$108.0 million driven by the launch of XLS-Medical Forte 5 and new products in the Phytosun[®] naturals portfolio, a \$45.0 million increase due to our acquisition of Ranir, and volume increases in our UK store brand business, partially offset by lower net sales in France associated with restructuring the sales force and a \$13.1 million decrease due to discontinued products; more than offset by
- \$88.7 million decrease due to:
 - \$86.9 million decrease due primarily to unfavorable Euro foreign currency translation; and
 - \$1.8 million decrease due to the retail market withdrawal of Ranitidine products.

Operating income increased \$12.8 million, or 188%, due to:

- \$29.2 million decrease in gross profit due primarily to unfavorable Euro foreign currency translation, partially offset by the acquisition of Ranir and a 150 basis point decrease in gross profit as a percentage of net sales due primarily to improved performance in the UK store brand business and the acquisition of Ranir, both of which have relatively lower gross margins than the overall portfolio; more than offset by
- \$42.0 million decrease in operating expenses due primarily to:
 - \$42.4 million decrease in selling and administrative expenses due primarily to favorable Euro foreign currency translation, partially offset by an increase in employee-related expenses; and
 - \$7.7 million decrease in restructuring expenses due primarily to the absence of cost reduction initiatives that were taken in the prior year; partially offset by
 - \$7.9 million increase in impairment charges due primarily to a certain definite-lived intangible asset.

Year Ended December 31, 2018 vs. December 31, 2017

<i>(in millions)</i>	Year Ended	
	December 31, 2018	December 31, 2017
Net sales	\$ 1,399.3	\$ 1,406.2
Gross profit	\$ 668.7	\$ 651.2
Gross profit %	47.8%	46.3 %
Operating income (loss)	\$ 6.8	\$ (2.7)
Operating income (loss) %	0.5%	(0.2)%

Net sales decreased \$6.9 million due primarily to:

- \$11.2 million net decrease due primarily to lower sales in the healthy lifestyle and upper respiratory categories and \$19.7 million decrease due to discontinued products, partially offset by new product sales of \$76.6 million; partially offset by
- \$4.3 million increase due to:
 - \$37.3 million increase due to favorable Euro foreign currency translation; partially offset by
 - \$33.0 million decrease due to the exited Russian business and 2017 distribution phase out initiatives.

Operating income increased \$9.5 million due to:

- \$17.5 million increase in gross profit, or a 150 basis point increase in gross profit as a percentage of net sales, due primarily to brand prioritization and exit of low margin businesses, improved pricing and benefits from continued insourcing initiatives; partially offset by
- \$8.0 million increase in operating expenses due primarily to \$5.8 million increase in distribution expense, and \$3.0 million increase in R&D expense due primarily to innovation investments and the effect of foreign currency translation.

PRESCRIPTION PHARMACEUTICALS

Recent Trends and Developments

- Although pricing pressure is showing some signs of moderation, during 2019 we continued to experience a significant year-over-year reduction in pricing in our RX segment due to competitive pressure. We expect softness in pricing to continue to impact the segment for the foreseeable future.
- On February 24, 2020, along with our partner Catalent Pharma Solutions, we received approval from the U.S. Food and Drug Administration on our abbreviated new drug application for generic albuterol sulfate inhalation aerosol, the first AB-rated generic version of ProAir[®] HFA. Shortly after approval, we launched with limited commercial quantities and anticipate that we will be in a position to provide a steady supply of this product by the fourth quarter of 2020.
- During the three months ended December 31, 2019, we tested our RX U.S. reporting unit for impairment. The impairment indicators related to a combination of industry and market factors that led to reduced projections of future cash flows. We determined the reporting unit was impaired and recorded an impairment charge of \$109.2 million.
- During the three months ended December 31, 2019, we identified impairment indicators on a definite-lived intangible asset related to our clindamycin and benzoyl peroxide topical gel (generic equivalent to Benzacilin[®]). Increased competition caused price erosion that lowered our long-range revenue forecast, which indicated the asset was no longer recoverable and was partially impaired. We recorded an asset impairment of \$21.2 million.
- On July 2, 2019, we purchased the Abbreviated New Drug Application ("ANDA") for a generic gel product for \$49.0 million in cash, which we capitalized as a developed product technology intangible asset. We launched the product during the third quarter of 2019.
- During the three months ended September 28, 2019, we identified impairment indicators related to our Evamist[®] branded product, which is a definite-lived intangible asset. The indicators related to a decline in sales volume and a corresponding reduction in our long-range revenue forecast. We recorded an asset impairment of \$10.8 million.
- On May 17, 2019, we purchased the ANDA for a generic product used to relieve pain for \$15.7 million in cash, which we capitalized as a developed product technology intangible asset. We launched the product during the third quarter of 2019.

- During the three months ended June 29, 2019, we identified impairment indicators for a certain definite-lived asset related to changes in pricing and competition in the market, which lowered the projected cash flows we expect to generate from the asset. We recorded an asset impairment of \$27.8 million.

Segment Financial Results

Year Ended December 31, 2019 vs. December 31, 2018

<i>(in millions)</i>	Year Ended	
	December 31, 2019	December 31, 2018
Net sales	\$ 967.5	\$ 920.8
Gross profit	\$ 334.9	\$ 373.9
Gross profit %	34.6%	40.6%
Operating income	\$ 2.6	\$ 214.6
Operating income %	0.3%	23.3%

Net sales increased \$46.7 million, or 5%, due primarily to:

- \$87.5 million increase due to new product sales of \$86.3 million driven mainly by Acyclovir cream (generic equivalent to Zovirax[®] cream), Testosterone Gel 1.62% (generic equivalent to Androgel[®]), and the Scopolamine Patch relaunch and higher volumes of existing product sales to meet the increased demand of our existing customers, partially offset by competition-driven pricing pressure; partially offset by
- \$41.8 million of discontinued products.

Operating income decreased \$212.0 million, or 99%, due to:

- \$39.0 million decrease in gross profit, or a 600 basis point decrease in gross profit as a percentage of net sales, due primarily to competition-driven pricing pressure, and unfavorable product mix; and
- \$173.0 million increase in operating expense due primarily to \$170.7 million increase in impairment charges related to goodwill, certain definite-lived intangible assets and IPR&D, and a \$4.8 million increase in R&D expense due primarily to pre-commercialization R&D costs for generic albuterol sulfate inhalation aerosol, the generic version of ProAir[®] HFA.

Year Ended December 31, 2018 vs. December 31, 2017

<i>(in millions)</i>	Year Ended	
	December 31, 2018	December 31, 2017
Net sales	\$ 920.8	\$ 1,054.4
Gross profit	\$ 373.9	\$ 454.6
Gross profit %	40.6%	43.1%
Operating income	\$ 214.6	\$ 306.1
Operating income %	23.3%	29.0%

Net sales decreased \$133.6 million, or 13%, due primarily to:

- \$176.8 million decrease due to \$162.2 million decrease in sales of existing products due primarily to increased competition-driven pricing pressure and decreased sales volumes of certain products and \$14.6 million decrease due to discontinued products; partially offset by

- \$43.2 million increase due to new product sales due primarily to Testosterone Gel 1.62% (generic equivalent to AndroGel®).

Operating income decreased \$91.5 million, or 30%, due to:

- \$80.7 million decrease in gross profit, or a 250 basis point decrease in gross profit as a percentage of net sales, due primarily to pricing pressure and unfavorable product mix as a result of sales growth in lower margin products; and
- \$10.8 million increase in operating expense due primarily to:
 - \$23.0 million increase for the absence of the gain on the sale of certain ANDAs recognized in the prior year, \$15.0 million increase for the absence of the gain related to contingent consideration adjustments, and \$9.8 million increase in R&D expense due to timing of clinical trials; partially offset by
 - \$34.9 million decrease in impairment charges related to certain definite-lived intangible assets and IPR&D.

OTHER

We previously had two legacy segments, Specialty Sciences and Other, which contained our Tysabri® financial asset and API businesses, respectively, which we divested. Following these divestitures, there were no substantial assets or operations left in either of these segments. Effective January 1, 2017, all expenses associated with our former Specialty Sciences segment were moved to unallocated expenses.

During the year ended December 31, 2017, we completed the divestment of the Tysabri® financial asset to Royalty Pharma for \$2.2 billion upfront in cash and up to \$250.0 million and \$400.0 million in milestone payments if the royalties on global net sales of Tysabri® that are received by Royalty Pharma meet specific thresholds in 2018 and 2020, respectively. As a result of this transaction, we transferred the entire financial asset to Royalty Pharma and recorded a \$17.1 million gain in Change in financial assets. See "Interest, Other (Income) Expense and Change in Financial Assets (Consolidated)" below.

During the year ended December 31, 2017, we completed the sale of our India API business to Strides Shasun Limited. We received \$22.2 million in proceeds, resulting in an immaterial gain recorded in Other (income) expense, net on the Consolidated Statements of Operations. Prior to closing the sale, we determined that the carrying value of the India API business exceeded its fair value less the cost to sell, resulting in an impairment charge of \$35.3 million, which was recorded in Impairment charges on the Consolidated Statements of Operations for the year ended December 31, 2016.

During the year ended December 31, 2017, we completed the sale of our Israel API business to SK Capital for a sale price of \$110.0 million, which resulted in an immaterial gain recorded in Other (income) expense, net on the Consolidated Statements of Operations.

Unallocated Expenses

Unallocated expenses are comprised of certain corporate services not allocated to our reporting segments and are recorded above Operating income on the Consolidated Statements of Operations. Unallocated expenses were as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 231.4	\$ 159.2	\$ 183.9

The \$72.2 million increase for the year ended December 31, 2019 compared to the prior year was due primarily to a \$31.0 million increase in legal and consulting fees partially due to the absence of a \$17.8 million insurance recovery received in the prior year, a \$15.6 million increase in acquisition and integration-related charges related to the Ranir acquisition, a \$13.8 million increase in employee compensation expenses, and a \$10.7 million increase due primarily to our strategic transformation initiative and the reorganization of our executive management team.

The \$24.7 million decrease for the year ended December 31, 2018 compared to the prior year was due primarily to an insurance recovery of \$17.8 million, a decrease in legal and consulting fees of \$8.7 million and, a decrease in restructuring expense of \$5.5 million related to strategic organizational enhancements; partially offset by an increase in employee-related expenses of \$5.2 million.

Interest, Other (Income) Expense and Change in Financial Assets (Consolidated)

(in millions)	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Change in financial assets	\$ (22.1)	\$ (188.7)	\$ 24.9
Interest expense, net	\$ 121.7	\$ 128.0	\$ 168.1
Other (income) expense, net	\$ (66.0)	\$ 6.1	\$ (10.1)
Loss on extinguishment of debt	\$ 0.2	\$ 0.5	\$ 135.2

Change in Financial Assets

The proceeds from our 2017 sale of the Tysabri[®] financial asset consisted of \$2.2 billion in upfront cash and up to \$250.0 million and \$400.0 million in contingent milestone payments related to 2018 and 2020, respectively. During the year ended December 31, 2019 we received the \$250.0 million contingent milestone payment.

During the year ended December 31, 2019 the fair value of the Royalty Pharma milestone payment related to 2020 increased by \$22.1 million to \$95.3 million. These adjustments were driven by higher projected global net sales of Tysabri[®] and the estimated probability of achieving the earn-out.

In order for us to receive the milestone payment related to 2020 of \$400.0 million, Royalty Pharma payments from Biogen for Tysabri[®] sales in 2020 must exceed \$351.0 million. The Royalty Pharma payments from Biogen for Tysabri[®] were \$337.5 million in 2018. If Royalty Pharma payments from Biogen for Tysabri[®] sales do not meet the prescribed threshold in 2020, we will write-off the \$95.3 million asset and record a loss. If the prescribed threshold is exceeded, we will increase the asset to \$400.0 million and recognize income of \$304.7 million in Change in financial assets on the Consolidated Statements of Operations (refer to [Item 8. Note 7](#)).

During the year ended December 31, 2018, royalties on global net sales of Tysabri[®] received by Royalty Pharma met the 2018 threshold resulting in an increase to the asset and a gain of \$170.1 million recognized in Change in financial assets on the Consolidated Statement of Operations. Also during that period, the fair value of the remaining Royalty Pharma contingent milestone payment related to 2020 increased \$18.6 million due to higher projected global net sales of Tysabri[®] and the estimated probability of achieving the contingent milestone payment related to 2020.

Interest Expense, Net

The \$6.3 million decrease during the year ended December 31, 2019 compared to the prior year was due primarily to changes in our underlying hedge exposure and interest income (refer to [Item 8. Note 9](#)).

The \$40.1 million decrease during the year ended December 31, 2018 compared to the prior year was the result of early debt repayments made during the year ended December 31, 2017.

Other (Income) Expense, Net

The \$72.1 million change was due primarily to a \$71.7 million pre-tax gain on the sale of our animal health business (refer to [Item 8. Note 3](#))

The \$16.2 million decrease during the year ended December 31, 2018 compared to the prior year was due primarily to the absence of \$10.0 million in milestone income related to royalty rights, a \$9.5 million loss on our fair value investment securities, and \$4.5 million of unfavorable changes in revaluation of monetary assets and liabilities held in foreign currencies; partially offset by the absence of a \$5.9 million loss on hedges related to the extinguishment of debt in the prior year, and a \$2.7 million gain on our equity method investments.

Loss on Extinguishment of Debt

During the year ended December 31, 2017, we recorded a \$135.2 million loss on extinguishment of debt, which consisted of tender premium on debt repayments, transaction costs, write-off of deferred financing fees, and bond discounts.

Income Taxes (Consolidated)

The effective tax rates were as follows:

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
14.6%	54.9%	57.3%

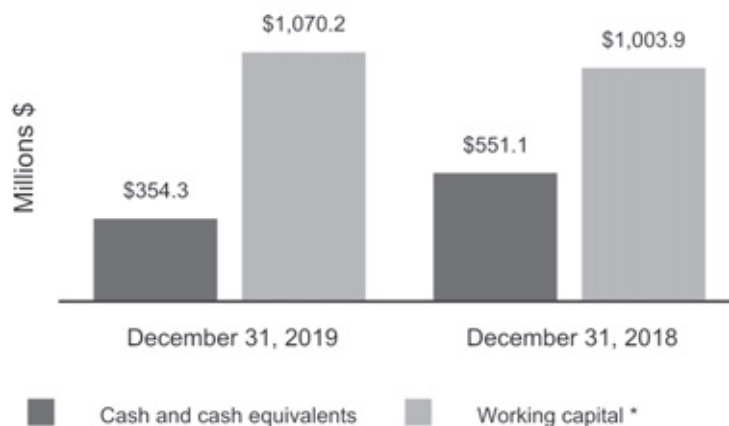
The effective tax rate for the year ended December 31, 2019 decreased in comparison to the prior year due primarily to a decrease in the U.S. valuation allowance offset by increased U.S. permanent adjustments largely due to disallowed interest expense.

The effective tax rate for the year ended December 31, 2018 decreased in comparison to the prior year due primarily to the 2017 sale of API Israel and the one-time U.S. transition toll tax, offset by additional tax expense due to valuation allowances in Belgium and state tax recorded for the future distributions of foreign earnings recorded in 2018.

FINANCIAL CONDITION, LIQUIDITY, AND CAPITAL RESOURCES

We finance our operations with internally generated funds, supplemented by credit arrangements with third parties and capital market financing. We routinely monitor current and expected operational requirements and financial market conditions to evaluate other available financing sources including revolving bank credit and securities offerings. In determining our future capital requirements, we regularly consider, among other factors, known trends and uncertainties, such as the Notice of Assessment ("NoA") and the draft and final Notices of Proposed Adjustment ("NOPAs") and other contingencies. We note that no payment of the additional amounts assessed by Irish Revenue pursuant to the NoA or proposed by the IRS in the NOPAs is currently required, and no such payment is expected to be required, unless and until a final determination of the matter is reached that is adverse to us, which could take several years in either case (refer to [Item 8. Note 15](#) for additional information on the NoA and NOPAs). Based on the foregoing, management believes that our operations and borrowing resources are sufficient to provide for our short-term and long-term capital requirements, as described below. However, an adverse result with respect to our appeal of any material outstanding tax assessments or litigation, including securities or drug pricing matters, could ultimately require the use of corporate assets to pay such assessments, damages resulting from third-party claims, and related interest and/or penalties, and any such use of corporate assets would limit the assets available for other corporate purposes. As such, we continue to evaluate the impact of the above factors on liquidity and may determine that modifications to our capital structure are appropriate if market conditions deteriorate, favorable capital market opportunities become available, or any change in conditions relating to the NoA, the NOPAs or other contingencies have a material impact on our capital requirements.

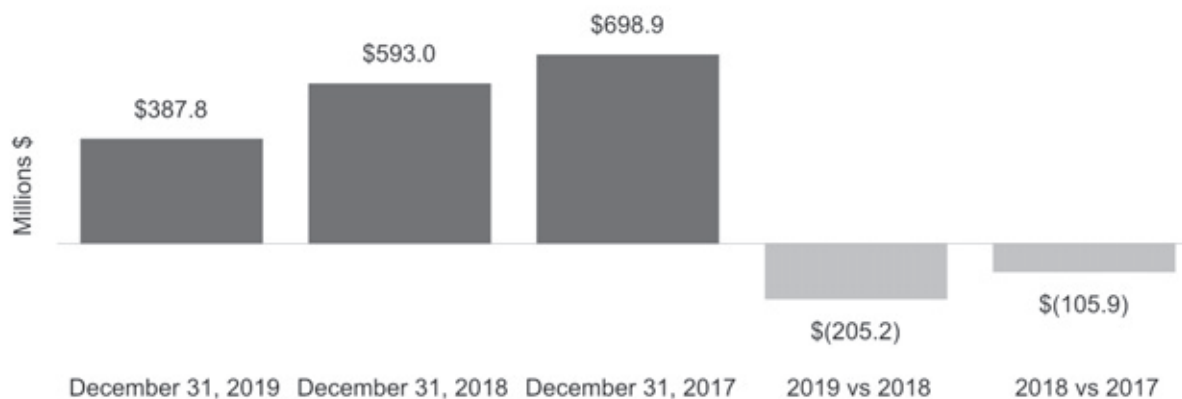
Cash and Cash Equivalents



* Working capital represents current assets less current liabilities, excluding cash and cash equivalents and current indebtedness.

Cash, cash equivalents, cash flows from operations, and borrowings available under our credit facilities are expected to be sufficient to finance our liquidity and capital expenditures in both the short and long term. Although our lenders have made commitments to make funds available to us in a timely fashion under our revolving credit agreements and overdraft facilities, if economic conditions worsen or new information becomes publicly available impacting the institutions' credit rating or capital ratios, these lenders may be unable or unwilling to lend money pursuant to our existing credit facilities. Should our outlook on liquidity requirements change substantially from current projections, we may seek additional sources of liquidity in the future.

Cash Generated by (Used in) Operating Activities



Year Ended December 31, 2019 vs. December 31, 2018

The \$205.2 million decrease in operating cash flow was due primarily to:

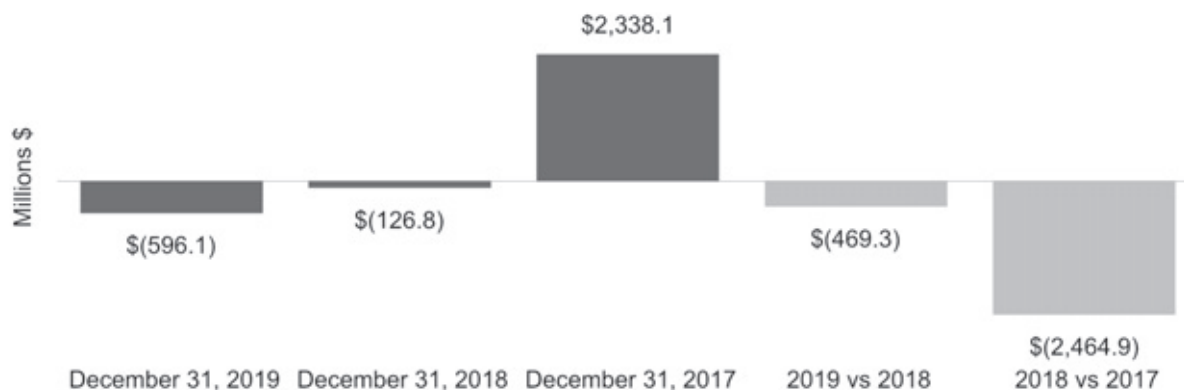
- \$161.7 million decrease in cash due to the change in accounts receivable due primarily to timing of sales and receipt of payments primarily in RX and CSCI, and our acquisition of Ranir;
- \$142.6 million decrease in cash due to prior year tax payments made in the current year, current year estimated tax payments, and an Israeli withholding tax payment; and
- \$74.1 million decrease in cash due to the change in accrued customer programs due primarily to pricing dynamics in our RX segment, as well as timing of rebate and chargeback payments; partially offset by
- \$88.9 million increase in cash due to the change in net earnings after adjustments for items such as deferred income taxes, impairment charges, restructuring charges, changes in our financial assets, share-based compensation, amortization of debt premium, gain on sale of business, and depreciation and amortization;
- \$36.0 million increase in cash due primarily to changes in operating leases and litigation related settlements;
- \$31.6 million decrease in the use of cash primarily due to the continued build-up of inventory at a lower level than in the prior year to support customer demands and improved supply management in our CSCA and CSCI segments, and increased volumes in CSCI due to new product launches; and
- \$30.8 million decrease in the use of cash due to the change in accrued payroll and related taxes due primarily to an increase in employee incentive compensation expense.

Year Ended December 31, 2018 vs. December 31, 2017

The \$105.9 million decrease in operating cash flow was due primarily to:

- \$190.4 million decrease in cash due to the change in net earnings after adjustments for items such as deferred income taxes, impairment charges, restructuring charges, changes in our financial assets, loss on extinguishment of debt, and depreciation and amortization; and
- \$82.6 million decrease in cash due to the change in inventory due primarily to increased volumes and actions to improve customer service in our CSCA segment and increased volumes due to new product launches and changing market dynamics in our RX segment; partially offset by
- \$68.4 million increase in cash due to the change in accounts payable due primarily to timing of payments, mix of payment terms, and the absence of transactions related to the exited Russian business and prior year distribution phase out initiatives;
- \$74.2 million increase in cash due to the change in accrued income taxes due primarily to U.S. Federal tax obligation payments made in the prior year, offset by expected tax refunds;
- \$26.9 million increase in cash due to the change in accrued liabilities due primarily to the change in royalty and profit sharing accruals; and
- \$17.8 million increase in cash due to the change in accounts receivable due primarily to the discontinuation of our Belgium accounts receivable factoring program, more than offset by timing of sales and receipt of payments in our CSCA and RX segments.

Cash Generated by (Used in) Investing Activities



Year Ended December 31, 2019 vs. December 31, 2018

The \$469.3 million decrease in investing cash flow was due primarily to:

- \$747.7 million decrease in cash used for the acquisition of Ranir (refer to [Item 8. Note 3](#));
- \$113.5 million decrease in cash used for other acquisitions, primarily for the branded OTC rights to Prevacid[®]24HR for \$61.7 million, an ANDA for a generic gel product for \$49.0 million, an ANDA for a generic product used to relieve pain for \$15.7 million, and Budesonide Nasal Spray and Triamcinolone Nasal Spray for \$14.0 million, partially offset by the absence of \$35.6 million of prior year acquisitions primarily related to an ANDA for a generic topical cream (refer to [Item 8. Note 3](#)); and
- \$35.1 million decrease in cash used for capital spending, primarily to increase tablet and infant formula capacity and quality/regulation projects; partially offset by
- \$250.0 million receipt of the Royalty Pharma contingent milestone proceeds (refer to [Item 8. Note 7](#)); and
- \$177.3 million in proceeds received from divestitures, primarily from our animal health business (refer to [Item 8. Note 3](#)).

Capital expenditures for the next twelve months are anticipated to be between \$175.0 million and \$225.0 million related to manufacturing productivity and efficiency initiatives, increased tablet and infant formula capacity and quality/regulatory projects. We expect to fund these estimated capital expenditures with funds from operating cash flows.

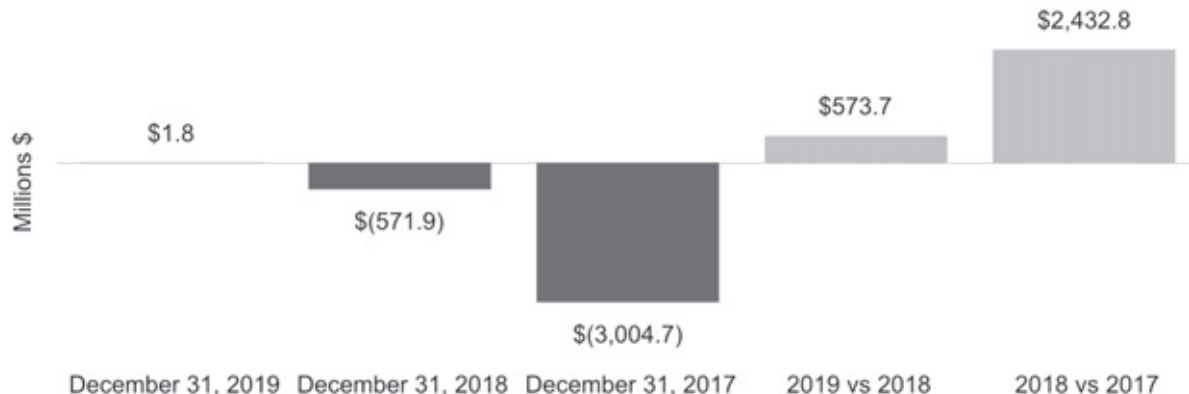
Year Ended December 31, 2018 vs. December 31, 2017

The \$2.5 billion decrease in investing cash flow was due primarily to:

- \$2.2 billion absence of proceeds from the 2017 divestment of our Tysabri[®] financial asset to Royalty Pharma;
- \$149.4 million absence of 2017 net proceeds from sale of business and other assets;
- \$73.6 million decrease in proceeds from royalty rights; and
- \$35.6 million decrease in cash due primarily to the acquisition of an ANDA for a generic topical cream.

Cash used for capital expenditures totaled \$102.6 million during the year ended December 31, 2018 compared to \$88.6 million in the prior year. The increase in cash used for capital expenditures was due primarily to the increase in the number of manufacturing projects in the current year compared to the prior year.

Cash Generated by (Used in) Financing Activities



Year Ended December 31, 2019 vs. December 31, 2018

The \$573.7 million increase in financing cash flow was due primarily to:

- \$400.0 million absence in share repurchases;
- \$169.0 million increase due to the issuance of long-term debt in our \$600.0 million refinance of the 2018 Term Loan in the current period, offset by the absence of our \$431.0 million refinance of the 2014 Term Loan; and
- \$4.9 million increase in the change in net borrowings (repayments) of revolving credit agreements and other financing; and
- \$6.5 million decrease in payments on long-term debt; partially offset by
- \$7.5 million increase in dividend payments.

Year Ended December 31, 2018 vs. December 31, 2017

The \$2.4 billion increase in financing cash flow was due primarily to:

- \$2.1 billion and \$116.1 million decrease due to payments on long-term debt and premium on early debt retirement, respectively, related to debt extinguishment in 2017; and
- \$431.0 million increase in issuance of long-term debt in 2018; partially offset by
- \$208.5 million increase in share repurchases.

Share Repurchases

In October 2018, our Board of Directors authorized up to \$1.0 billion of share repurchases with no expiration date, subject to the Board of Directors' approval of the pricing parameters and amount that may be repurchased under each specific share repurchase program. Share repurchases were \$0.0 million, \$400.0 million, and \$191.5 million for the years ended December 31, 2019, December 31, 2018, and December 31, 2017, respectively.

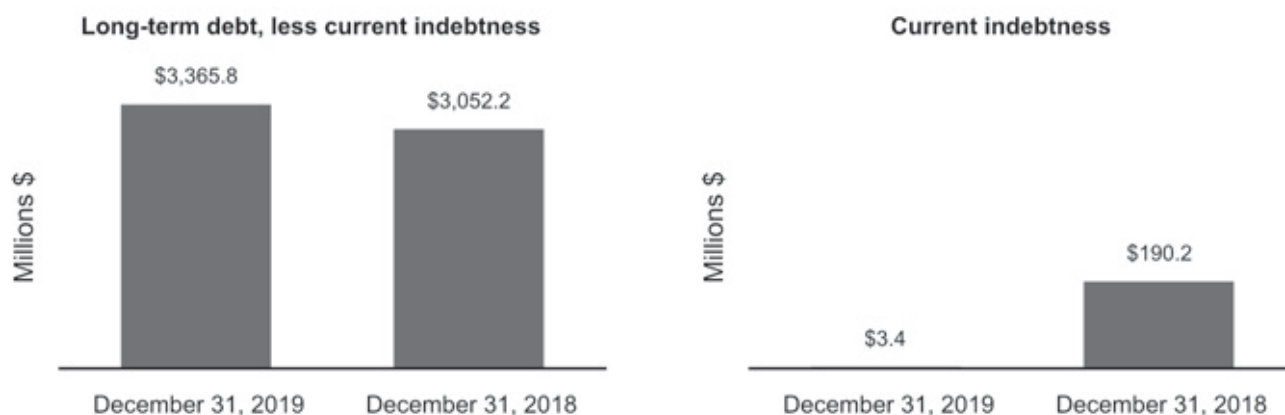
Dividends

In January 2003, the Board of Directors adopted a policy of paying quarterly dividends. We paid dividends as follows:

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Dividends paid (in millions)	\$ 112.4	\$ 104.9	\$ 91.1
Dividends paid per share	\$ 0.82	\$ 0.76	\$ 0.64

The declaration and payment of dividends, if any, is subject to the discretion of our Board of Directors and will depend on our earnings, financial condition, availability of distributable reserves, capital and surplus requirements, and other factors our Board of Directors may consider relevant.

Borrowings and Capital Resources



Overdraft Facilities

We have overdraft facilities available that we use to support our cash management operations. We report any balances outstanding in "Other Financing" in [Item 8, Note 11](#). There were no borrowings outstanding under the facilities as of December 31, 2019 or December 31, 2018.

Leases

We had \$158.2 million of lease liabilities and \$157.5 million of lease assets as of December 31, 2019.

Accounts Receivable Factoring

We have accounts receivable factoring arrangements with non-related third-party financial institutions (the "Factors"). Pursuant to the terms of the arrangements, we sell to the Factors certain of our accounts receivable balances on a non-recourse basis for credit approved accounts. An administrative fee per invoice is charged on the gross amount of accounts receivables assigned to the Factors, and interest is calculated at the applicable EUR LIBOR rate plus a spread. The total amount factored on a non-recourse basis and excluded from accounts receivable was \$10.0 million and \$24.3 million at December 31, 2019 and December 31, 2018, respectively.

Revolving Credit Agreements

On March 8, 2018, we terminated the revolving credit agreement entered into in December 2014 and entered into a \$1.0 billion revolving credit agreement maturing on March 8, 2023 (the "2018 Revolver"). There were no borrowings outstanding under the 2018 Revolver as of December 31, 2019 or December 31, 2018.

Term Loans, Notes and Bonds

Total Term Loans, Notes and Bonds outstanding are summarized as follows (in millions):

		Year Ended	
		December 31, 2019	December 31, 2018
Term loan			
*	2018 Term loan due March 8, 2020	\$ —	\$ 351.3
	2019 Term loan due August 15, 2022	600.0	—
	Total term loans	600.0	351.3
Notes and bonds			
	<u>Coupon</u>	<u>Due</u>	
*	5.000%	May 23, 2019	—
	3.500%	March 15, 2021	280.4
	3.500%	December 15, 2021	309.6
*	5.105%	July 28, 2023	151.4
	4.000%	November 15, 2023	215.6
	3.900%	December 15, 2024	700.0
	4.375%	March 15, 2026	700.0
	5.300%	November 15, 2043	90.5
	4.900%	December 15, 2044	303.9
	Total notes and bonds	\$ 2,751.4	\$ 2,892.5

* Debt denominated in euros subject to fluctuations in the euro-to-U.S. dollar exchange rate.

Debt Repayments

During the year ended December 31, 2019, we made \$24.7 million in scheduled principal payments. In connection with the Omega acquisition, on March 30, 2015, we assumed a 5.000% retail bond due 2019 in the amount of €120.0 million (\$130.7 million). On May 23, 2019 we repaid the bond in full. On August 15, 2019, we refinanced the €284.4 million (\$317.1 million) outstanding under the 2018 Term Loan with the proceeds of a new \$600.0 million term loan (the "2019 Term Loan"), maturing on August 15, 2022. During the year ended December 31, 2018, we made \$51.5 million in scheduled principal payments.

We are in compliance with all covenants under our debt agreements as of December 31, 2019 (refer to [Item 8](#), [Note 11](#) and [Note 10](#) for more information on all of the above debt facilities and lease activity, respectively).

Credit Ratings

Our credit ratings on December 31, 2019 were Baa3 (stable) and BBB- (stable) by Moody's Investors Service and S&P Global Ratings, respectively.

Credit rating agencies review their ratings periodically and, therefore, the credit rating assigned to us by each agency may be subject to revision at any time. Accordingly, we are not able to predict whether current credit ratings will remain as disclosed above. Factors that can affect our credit ratings include changes in operating performance, the economic environment, our financial position, and changes in business strategy. If changes in our credit ratings were to occur, they could impact, among other things, future borrowing costs, access to capital markets, and vendor financing terms.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements that have a material current effect or that are reasonably likely to have a material future effect on our financial condition, changes in financial condition, net sales or expenses, results of operations, liquidity, capital expenditures, or capital resources. We acquire and collaborate on potential products still in development and enter into R&D arrangements with third parties that often require milestone payments to the third-party contingent upon the occurrence of certain future events linked to the success of the asset in development. Milestone payments may be required contingent upon the successful achievement of an important point in the development life cycle of the product. Because of the contingent nature of these payments, they are not included in our table of contractual obligations below.

Contractual Obligations

Our enforceable and legally binding obligations as of December 31, 2019 are set forth in the following table. Some of the amounts included in this table are based on management's estimates and assumptions about these obligations, including the duration, the possibility of renewal, anticipated actions by third parties and other factors. Because these estimates and assumptions are necessarily subjective, the enforceable and legally binding obligations actually paid in future periods may vary from the amounts reflected in the table (in millions):

	Payment Due				Total
	2020	2021-2022	2023-2024	After 2024	
Short and long-term debt ⁽¹⁾	\$ 128.1	\$ 1,412.8	\$ 1,237.2	\$ 1,519.5	\$ 4,297.6
Capital lease obligations	4.1	8.1	3.0	14.2	29.4
Purchase obligations ⁽²⁾	824.1	21.5	0.3	—	845.9
Operating leases ⁽³⁾	37.2	47.6	26.9	41.5	153.2
Other contractual liabilities reflected on the consolidated balance sheets:					
Deferred compensation and benefits ⁽⁴⁾	—	—	—	104.8	104.8
Other ⁽⁵⁾	50.4	6.6	1.8	—	58.8
Total	\$ 1,043.9	\$ 1,496.6	\$ 1,269.2	\$ 1,680.0	\$ 5,489.7

- (1) Short-term and long-term debt includes interest payments, which were calculated using the effective interest rate at December 31, 2019.
- (2) Consists of commitments for both materials and services.
- (3) Used in normal course of business, principally for warehouse facilities and computer equipment.
- (4) Includes amounts associated with non-qualified plans related to deferred compensation, executive retention and post employment benefits. Of this amount, we have funded \$34.4 million, which is recorded in Other non-current assets on the balance sheet. These amounts are assumed payable after five years, although certain circumstances, such as termination, would require earlier payment.
- (5) Primarily includes consulting fees, legal settlements, contingent consideration obligations, restructuring accruals, insurance obligations, and electrical and gas purchase contracts, which were accrued in Other current liabilities and Other non-current liabilities at December 31, 2019 for all years.

We fund our U.S. qualified profit-sharing and investment plan in accordance with the Employee Retirement Income Security Act of 1974 regulations for the minimum annual required contribution and Internal Revenue Service regulations for the maximum annual allowable tax deduction. We are committed to making the required minimum contributions, which we expect to be approximately \$24.8 million over the next 12 months. Future contributions are dependent upon various factors, including employees' eligible compensation, plan participation and changes, if any, to current funding requirements. Therefore, no amounts were included in the Contractual Obligations table above. We generally expect to fund all future contributions with cash flows from operating activities.

As of December 31, 2019, we had approximately \$448.6 million of liabilities for uncertain tax positions, including interest and penalties. These unrecognized tax benefits have been excluded from the Contractual Obligations table above due to uncertainty as to the amounts and timing of settlement with taxing authorities.

Net deferred income tax liabilities were \$275.2 million as of December 31, 2019. This amount is not included in the Contractual Obligations table above because we believe this presentation would not be meaningful. Net deferred income tax liabilities are calculated based on temporary differences between the tax basis of assets and liabilities and their book basis, which will result in taxable amounts in future years when the book basis is

settled. The results of these calculations do not have a direct connection with the amount of cash taxes to be paid in any future periods. As a result, scheduling net deferred income tax liabilities as payments due by period could be misleading because this scheduling would not relate to liquidity needs.

Critical Accounting Estimates

The determination of certain amounts in our financial statements requires the use of estimates. These estimates are based upon our historical experiences combined with management's understanding of current facts and circumstances. Although the estimates are considered reasonable based on the currently available information, actual results could differ from the estimates we have used. Management considers the below accounting estimates to require the most judgment and to be the most critical in the preparation of our financial statements. These estimates are reviewed by the Audit Committee.

Revenue Recognition

Net product sales include estimates of variable consideration for which accruals and allowances are established. Variable consideration for product sales consists primarily of chargebacks, rebates, other incentive programs, and related administrative fees recorded on the Consolidated Balance Sheets as Accrued customer programs, and sales returns and shelf stock allowances recorded on the Consolidated Balance Sheets as a reduction to Accounts receivable. Where appropriate, these estimates take into consideration a range of possible outcomes in which relevant factors, such as historical experience, current contractual and statutory requirements, specific known market events and trends, industry data and forecasted customer buying and payment patterns, are either probability-weighted to derive an estimate of expected value or the estimate reflects the single most likely outcome. Overall, these reserves reflect the best estimates of the amount of consideration to which we are entitled based on the terms of the contract. Actual amounts of consideration ultimately received may differ from our estimates. If actual results in the future vary from the estimates, these estimates are adjusted, which would affect revenue and earnings in the period such variances become known.

The aggregate gross-to-net adjustments related to RX products can exceed 50% of the segment's gross sales. In contrast, the aggregate gross-to-net adjustments related to CSCA and CSCI typically do not exceed 10% of the segment's gross sales. The following table summarizes the activity in Accrued customer programs and allowance accounts on the Consolidated Balance Sheets (in millions):

	RX				All Other Segments	Total
	Chargebacks	Medicaid Rebates	Sales Returns and Shelf Stock Allowances	Admin. Fees and Other Rebates	Rebates and Other Allowances	
Balance at December 31, 2017	\$ 229.9	\$ 36.8	\$ 76.2	\$ 43.2	\$ 126.2	\$ 512.3
Foreign currency translation adjustments	—	—	—	—	(3.5)	(3.5)
Provisions / Adjustments	1,754.4	58.3	17.0	99.6	270.3	2,199.6
Credits / Payments	(1,718.3)	(58.7)	(22.2)	(98.3)	(276.1)	(2,173.6)
Balance at December 31, 2018	\$ 266.0	\$ 36.4	\$ 71.0	\$ 44.5	\$ 116.9	\$ 534.8
Balances acquired in business acquisition	—	—	—	—	5.7	5.7
Balances disposed of in business divestiture	—	—	—	—	(4.1)	(4.1)
Foreign currency translation adjustments	—	—	—	—	(1.7)	(1.7)
Provisions / Adjustments	2,127.2	47.9	33.9	116.5	224.6	2,550.1
Credits / Payments	(2,157.4)	(56.7)	(33.4)	(126.3)	(227.3)	(2,601.1)
Balance at December 31, 2019	\$ 235.8	\$ 27.6	\$ 71.5	\$ 34.7	\$ 114.1	\$ 483.7

Chargebacks

We market and sell U.S. Rx pharmaceutical products directly to wholesalers, distributors, warehousing pharmacy chains, and other direct purchasing groups. We also market products indirectly to independent pharmacies, non-warehousing chains, managed care organizations, and group purchasing organizations, (collectively referred to as "indirect customers"). In addition, we enter into agreements with some indirect customers to establish contract pricing for certain products. These indirect customers then independently select a wholesaler from which to purchase the products at these contracted prices. Alternatively, we may pre-authorize wholesalers to offer specified contract pricing to other indirect customers. Under either arrangement, we provide chargeback credit to the wholesaler for any difference between the contracted price with the indirect customer and the wholesaler's invoice price. The accrual for chargebacks includes an estimate for outstanding claims that occurred but for which the related claim has not yet been paid, and an estimate for future claims that will be made when the wholesaler inventory is sold to the indirect customer. This estimate is based on historical chargeback experience, which includes sell-through levels by wholesalers to retailers, and confirmed wholesaler inventory levels. We regularly assess current pricing dynamics and wholesaler inventory levels to ensure the liability for future chargebacks is fairly stated.

Medicaid Rebates

We participate in certain qualifying U.S. federal and state government programs whereby discounts and rebates are provided to participating government entities. Medicaid rebates are amounts owed based upon contractual agreements or legal requirements with public sector (Medicaid) benefit providers, after the final dispensing of the product by a pharmacy to a benefit plan participant. Medicaid reserves are based on expected payments, which are driven by patient usage, contract performance, and field inventory that will be subject to a Medicaid rebate. Medicaid rebates are typically billed up to 180 days after the product is shipped, but can be billed as many as 270 days after the quarter in which the product is dispensed to the Medicaid participant. As a result, our Medicaid rebate provision includes an estimate of outstanding claims for end-customer sales that occurred but for which the related claim has not been billed, and an estimate for future claims that will be made when inventory in the distribution channel is sold through to plan participants. Our calculation also requires other estimates, such as estimates of sales mix, to determine which sales are subject to rebates and the amount of such rebates. Our rebates are reviewed on a monthly basis against actual claims data to ensure the liability is fairly stated.

Returns and Shelf Stock Allowances

We maintain a return policy that allows our customers to return product within a specified period prior to and subsequent to the expiration date. Generally, product may be returned for a period beginning six months prior to its expiration date to up to one year after its expiration date. The majority of our product returns are the result of product dating, which falls within the range set by our policy, and are settled through the issuance of a credit to the customer. Our estimate of the provision for returns is based upon our historical experience with actual returns, which is applied to the level of sales for the period that corresponds to the period during which our customers may return product. The period is based on the shelf life of the products at the time of shipment. Additionally, when establishing our reserves, we consider factors such as levels of inventory in the distribution channel, product dating and expiration period, size and maturity of the market prior to a product launch, entrance into the market of additional competition, and changes in formulations.

Shelf stock allowances are credits issued to reflect changes in the selling price of a product and are based upon estimates of the amount of product remaining in a customer's inventory at the time of the anticipated price change. In many cases, the customer is contractually entitled to such a credit. The allowances for shelf stock adjustments are based on specified terms with certain customers, estimated launch dates of competing products, and estimated changes in market price.

RX Administrative Fees and Other Rebates

Rebates or administrative fees are offered to certain wholesale customers, group purchasing organizations, and end-user customers. Settlement of rebates and fees generally may occur from one to 15 months from the date of sale. We provide a provision for rebates at the time of sale based on contracted rates and historical redemption rates. Estimates used to establish the provision include level of wholesaler inventories, contract sales volumes, and average contract pricing.

CSCA and CSCI Rebates and Other Allowances

In the CSCA and CSCI segments, we offer certain customers a volume incentive rebate if specific levels of product purchases are made during a specified period. The accrual for rebates is based on contractual agreements and estimated levels of purchasing. In addition, we have a reserve for product returns, primarily related to damaged and unsaleable products. We also have agreements with certain customers to cover promotional activities related to our products such as coupon programs, new store allowances, and product displays. The accrual for these activities is based on customer agreements and is established at the time product revenue is recognized.

Allowances for customer-related programs are generally recorded at the time of sale based on the estimates and methodologies described above. We continually monitor product sales provisions and re-evaluate these estimates as additional information becomes available, which includes, among other things, an assessment of current market conditions, trade inventory levels, and customer product mix. We make adjustments to these provisions at the end of each reporting period to reflect any such updates to the relevant facts and circumstances.

Income Taxes

Our tax rate is subject to adjustment over the balance of the year due to, among other things, income tax rate changes by governments; the jurisdictions in which our profits are determined to be earned and taxed; changes in the valuation of our deferred tax assets and liabilities; adjustments to estimated taxes upon finalization of various tax returns; adjustments to our interpretation of transfer pricing standards; changes in available tax credits, grants and other incentives; changes in stock-based compensation expense; changes in tax laws or the interpretation of such tax laws; changes in U.S. generally accepted accounting principles; expiration of or the inability to renew tax rulings or tax holiday incentives; and the repatriation of earnings with respect to which we have not previously provided taxes. For the year ended December 31, 2019 we recorded a net decrease in valuation allowances of \$56.6 million, comprised primarily of a decrease in the U.S. valuation allowance related to the acquisition of Ranir and disposal of the Perrigo Animal Health business.

Although we believe that our tax estimates are reasonable and that we prepare our tax filings in accordance with all applicable tax laws, the final determination with respect to any tax audit, and any related litigation, could be materially different from our estimates or from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on operating results and/or cash flows in the periods for which that determination is made. In addition, future period earnings may be adversely impacted by litigation costs, settlements, penalties, and/or interest assessments (refer to [Item 8. Note 15](#)).

Legal Contingencies

We are involved in product liability, patent, commercial, regulatory and other legal proceedings that arise in the normal course of business. We record a liability when a loss is considered probable and the amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range and no amount within that range is a better estimate, the minimum amount in the range is accrued. If a loss is not probable or a probable loss cannot be reasonably estimated, no liability is recorded. We have established reserves for certain of our legal matters (refer to [Item 8. Note 17](#)). We do not incorporate insurance recoveries into our reserves for legal contingencies. We separately record receivables for amounts due under insurance policies when we consider the realization of recoveries for claims to be probable, which may be different than the timing in which we establish the loss reserves.

Acquisition Accounting

We account for acquired businesses using the acquisition method of accounting, which requires that assets acquired and liabilities assumed be recorded at fair value, with limited exceptions. Any excess of the purchase price over the fair value of the specifically identified assets is recorded as goodwill. If the acquired net assets do not constitute a business, or substantially all of the fair value is in a single asset or group of similar assets, the transaction is accounted for as an asset acquisition and no goodwill is recognized. In an asset acquisition, acquired IPR&D with no alternative future use is charged to expense at the acquisition date.

Significant judgment is required in estimating the fair value of intangible assets and in assigning their respective useful lives. The acquired intangible assets can include customer relationships, trademarks, trade names, brands, developed product technology and IPR&D assets. In some of our acquisitions, we acquire IPR&D intangible assets. For acquisitions accounted for as business combinations, IPR&D is considered to be an indefinite-lived intangible asset until the research is completed, at which point it then becomes a definite-lived intangible asset, or is determined to have no future use and is then impaired. There are several methods that can be used to determine the fair value of our intangible assets. We typically use an income approach to value the specifically identifiable intangible assets which is based on forecasts of the expected future cash flows. We have historically used a relief from royalty or multi-period excess earnings methodology. The fair value estimates are based on available historical information and on future expectations and assumptions deemed reasonable by management but are inherently uncertain. We typically consult with an independent advisor to assist in the valuation of these intangible assets. Significant estimates and assumptions inherent in the valuations include discount rates, revenue growth assumptions and expected profit margins. We consider marketplace participant assumptions in determining the amount and timing of future cash flows along with the length of our customer relationships, the attrition, product or technology life cycles, barriers to entry and the risk associated with the cash flows in concluding upon our discount rate. While we use our best estimates and assumptions to accurately value assets acquired and liabilities assumed at the acquisition date, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, we may record adjustments to the purchase accounting. In addition, unanticipated market or macroeconomic events and circumstances may occur that could affect the accuracy or validity of the estimates and assumptions.

Determining the useful life of an intangible asset also requires judgment, as different types of intangible assets will have different useful lives and certain assets may even be considered to have indefinite useful lives. With the exception of certain trademarks, trade names, and brands and IPR&D, the majority of our acquired intangible assets are expected to have determinable useful lives. Our assessment as to the useful lives of these intangible assets is based on a number of factors including competitive environment, market share, trademark, brand history, underlying product life cycles, operating plans and the macroeconomic environment of the countries in which the trademarked or branded products are sold. Definite-lived intangible assets are amortized to expense over their estimated useful life.

Change in Financial Assets

We valued our contingent milestone payments from Royalty Pharma using a modified Black-Scholes Option Pricing Model ("BSOPM"). Key inputs in the BSOPM are the estimated volatility and rate of return of royalties on global net sales of Tysabri[®] that are received by Royalty Pharma until the contingent milestones are resolved. Volatility and the estimated fair value of the milestones have a positive relationship such that higher volatility translates to a higher estimated fair value of the contingent milestone payments. We assess volatility and rate of return inputs quarterly by analyzing certain market volatility benchmarks and the risk associated with Royalty Pharma achieving the underlying projected royalties. The table below represents the volatility and rate of return:

	Year Ended	
	December 31, 2019	December 31, 2018
Volatility	30.0%	30.0%
Rate of return	7.92%	8.05%

In order for us to receive the milestone payment related to 2020, Royalty Pharma payments from Biogen for Tysabri[®] sales in 2020 must exceed \$351.0 million. If Royalty Pharma payments from Biogen for Tysabri[®] sales do

not meet the prescribed threshold in 2020, we will write-off the \$95.3 million asset and record a loss. If the prescribed threshold is exceeded, we will increase the asset to \$400.0 million and recognize income of \$304.7 million in Change in financial assets on the Consolidated Statements of Operations (refer to [Item 8. Note 7](#)).

Goodwill

Goodwill represents amounts paid for an acquisition in excess of the fair value of net assets received. We have six reporting units subject to impairment testing annually, which we performed on the first day of the fourth quarter of the years ended December 31, 2019, 2018, and 2017. We performed impairment testing more frequently if events suggest an impairment may exist. We had triggering events during the second quarter of the year ended December 31, 2019 and the third quarter of the year ended December 31, 2018, and we performed interim impairment tests in those periods. The test for impairment requires us to make several estimates about fair value, most of which are based on projected future cash flows and market valuation multiples. The estimates associated with the goodwill impairment tests are considered critical due to the judgments required in determining fair value amounts, including projected future cash flows that include assumptions about future performance. The discount rates used in testing each of our reporting units' goodwill for impairment during our interim and annual testing were based on the weighted average cost of capital determined for each of our reporting units. In our annual impairment test as of September 29, 2019, discount rates ranged from 7.5% to 12.0%, and perpetual growth rates ranged from 0.0% to 2.0%. In our annual impairment test as of September 30, 2018, discount rates ranged from 8.5% to 13.8%, and perpetual growth rates ranged from 2.0% to 3.0%. Changes in these estimates may result in the recognition of an impairment loss. We recorded goodwill impairment losses of \$109.2 million related to our RX U.S. reporting unit and \$136.7 million related to animal health during the years ended December 31, 2019 and December 31, 2018, respectively, which were recorded in Impairment charges on the Consolidated Statements of Operations. No goodwill impairments were recorded during the year ended December 31, 2017.

The goodwill impairment that we recorded in the RX U.S. reporting unit during the fourth quarter of the year ended December 31, 2019 adjusted the carrying value of the reporting unit to its estimated fair value. Changes in discount rates, projected future cash flows, market valuation multiples and other estimates could result in additional goodwill impairment in this reporting unit in future periods.

During our annual goodwill testing as of September 29, 2019 and September 30, 2018, we determined the fair value of the Branded Consumer Self-care ("BCS") reporting unit included in the CSCI segment was less than 10.0% higher than its net book value in both analyses. We performed additional quantitative analysis during the three months ended December 31, 2018 and concluded that the fair value of the BCS reporting unit remained less than 10.0% higher than its net book value as of December 31, 2018. As a result of the relatively narrow margin between fair value and net book value during the three months ended December 31, 2019 and 2018, this reporting unit is at risk for future impairments if it experiences deterioration in business performance or market multiples or increases in discount rates.

During our annual goodwill testing as of September 29, 2019, we determined the fair value of the CSC UK and Australia reporting unit included in the CSCI segment was less than 20.0% higher than its net book value. With a margin between fair value and net book value in this range, the reporting unit is at risk for future goodwill impairments if it experiences deterioration in business performance or market multiples or increases in discount rates.

The discounted cash flow forecasts used for our reporting units include assumptions about future activity levels in the near term and longer-term. If growth in our reporting units is lower than expected, we may experience deterioration in our cash flow forecasts that may indicate goodwill in one or more reporting units is impaired in future impairment tests. We continue to monitor the progress of our reporting units and assess them for potential impairment should impairment indicators arise, as applicable, and at least annually during our fourth quarter impairment testing.

Management performed sensitivity analyses on the discounted cash flow valuations that were prepared to estimate the enterprise values of each reporting unit. Discount rates and perpetual revenue growth rates were increased and decreased by increments of 25 or 50 basis points. For the BCS reporting unit, a 75 basis point increase in the discount rate, or a 50 basis point increase in the discount rate combined with a 25 basis point decrease in the residual growth rate, would indicate potential impairment for this reporting unit. For the CSC UK and

Australia reporting unit, a 150 basis point increase in the discount rate, or a 100 basis point increase in the discount rate combined with a 50 basis point decrease in the residual growth rate, would indicate potential impairment for this reporting unit. Our sensitivities for both the BCS and CSC UK and Australia reporting units assume a corresponding decrease in market valuation multiples. Based on the sensitivity of the discount rate assumptions on these analyses, an increase in the discount rate over the next twelve months could negatively impact the estimated fair value of the reporting units and lead to a future impairment. Certain macroeconomic factors which are not controlled by the reporting units, such as rising inflation or interest rates, could cause an increase in the discount rate to occur. Deterioration in performance of our reporting units over the next twelve months, such as lower than expected revenue or profitability that has a sustained impact on future periods, could also represent potential indicators of impairment requiring further impairment analysis.

See [Item 8. Note 4](#) and [Note 7](#) for further information.

Recently Issued Accounting Standards Pronouncements

See [Item 8. Note 1](#) for information regarding recently issued accounting standards.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Exchange Risk

We are a global company with operations primarily throughout North America, Europe, Australia, Mexico, and Israel. We transact business in each location's local currency and in foreign currencies, thereby creating exposures to changes in exchange rates. Our largest exposure is the movement of the U.S. dollar relative to the euro. In addition, our U.S. operations continue to expand their export business, primarily in Canada, China, and Europe, and are subject to fluctuations in the respective exchange rates relative to the U.S. dollar. A large portion of the sales of our Israeli operations is in foreign currencies, primarily U.S. dollars and Euros, while these operations largely incur costs in their local currency. Further, a portion of Biogen's global sales of Tysabri[®] are denominated in local currencies, creating exposures to changes in exchange rates relative to the U.S. dollar and thereby impacting the amount of U.S. dollar royalties necessary to achieve our contingent payment threshold in 2020.

Due to different sales and cost structures, certain segments experience a negative impact and certain segments a positive impact as a result of changes in exchange rates. We estimate the translation effect of a ten percent devaluation of the U.S. dollar relative to the other foreign currencies in which we transact business would have increased operating income of our non-U.S. operating units by approximately \$31.4 million for the year ended December 31, 2019. This sensitivity analysis has inherent limitations. The analysis disregards the possibility that rates of multiple foreign currencies will not always move in the same direction relative to the value of the U.S. dollar over time and does not account for foreign exchange derivatives that we utilize to mitigate fluctuations in exchange rates.

In addition, we enter into certain purchase commitments for materials that, although denominated in U.S. dollars, are linked to foreign currency valuations. These commitments generally contain a range for which the price of materials may fluctuate over time given the value of a foreign currency.

The translation of the assets and liabilities of our non-U.S. dollar denominated operations is made using local currency exchange rates as of the end of the year. Translation adjustments are not included in determining net income but are disclosed in Accumulated Other Comprehensive Income ("AOCI") within shareholders' equity on the Consolidated Balance Sheets until a sale or substantially complete liquidation of the net investment in the subsidiary takes place. In certain markets, we could recognize a significant gain or loss related to unrealized cumulative translation adjustments if we were to exit the market and liquidate our net investment. As of December 31, 2019, cumulative net currency translation adjustments increased shareholders' equity by \$132.9 million.

We monitor and strive to manage risk related to foreign currency exchange rates. Exposures that cannot be naturally offset within a local entity to an immaterial amount are often hedged with foreign exchange derivatives or netted with offsetting exposures at other entities. We cannot predict future changes in foreign currency movements and fluctuations that could materially impact earnings.

Interest Rate Risk

We are exposed to interest rate changes primarily as a result of interest income earned on our investment of cash on hand and interest expense on borrowings.

We have in the past, and may in the future, enter into certain derivative financial instruments related to the management of interest rate risk, when available on a cost-effective basis. These instruments are managed on a consolidated basis to efficiently net exposures and thus take advantage of any natural offsets. Gains and losses on hedging transactions are offset by gains and losses on the underlying exposures being hedged. We do not use derivative financial instruments for speculative purposes.

See [Item 8. Note 9](#) and [Note 1](#) for further information regarding our derivative instruments and hedging activities.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Perrigo Company plc

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Perrigo Company plc (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and the financial statement schedule listed in the Index at Item 15(a) (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 at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

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, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 27, 2020 expressed an unqualified opinion thereon.

Adoption of Accounting Standards Update (ASU) No. 2017-04

As discussed in Note 4 to the consolidated financial statements, the Company changed its method of accounting for goodwill in 2019 due to the adoption of ASU No. 2017-04, *Intangibles - Goodwill and Other*.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Valuation of Goodwill for the RX U.S., BCS, and CSC UK and Australia Reporting Units

Description of the Matter

At December 31, 2019, the Company's goodwill was \$4,116.7 million. As discussed in Note 1 of the consolidated financial statements, goodwill is not amortized but rather is tested for impairment at least annually at the reporting unit level. The Company's goodwill is initially assigned to its reporting units as of the acquisition date. The Company recorded a goodwill impairment charge of \$109.2 million for the year ended December 31, 2019 in the RX U.S. reporting unit.

Auditing management's annual goodwill impairment test is complex and highly judgmental due to the significant measurement uncertainty in determining the fair value of the reporting units. In particular, the fair value estimates for the RX U.S., Branded Consumer Self-Care (BCS) and Consumer Self-Care UK and Australia (CSC UK and Australia) reporting units were sensitive to significant assumptions such as revenue growth, operating margins, and discount rate, which are affected by expected future market or economic conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's goodwill impairment assessment process. For example, we tested controls over the Company's forecast process as well as controls over management's review of the significant assumptions discussed above in estimating the fair values of the reporting units.

To test the fair value of the Company's reporting units, our audit procedures included, among others, assessing methodologies used and testing the significant assumptions discussed above as well as the completeness and accuracy of the underlying data used by the Company. For example, we compared the significant assumptions used by management to current industry and economic trends, changes in the Company's business model, customer base or product mix and other relevant factors. We performed sensitivity analyses of the significant assumptions to evaluate the change in the fair value of the reporting unit resulting from changes in the assumptions. We also reviewed the reconciliation of the fair value of the reporting units to the market capitalization of the Company and evaluated the implied control premium. We also assessed the historical accuracy of the significant assumptions used by management to determine the fair value of its reporting units. The evaluation of the Company's methodology and significant assumptions was performed with the assistance of our valuation specialists.

Uncertain Tax Positions

Description of the Matter

As described in Note 15 to the consolidated financial statements, the Company operates in multiple jurisdictions with complex tax policy and regulatory environments and establishes reserves for uncertain tax positions in accordance with the accounting guidance governing uncertainty in income taxes. Uncertainty in a tax position may arise because tax laws are subject to interpretation. The Company uses significant judgment to (1) determine whether, based on the technical merits, a tax position is more likely than not to be sustained and (2) measure the amount of tax benefit that qualifies for recognition. At December 31, 2019, the Company had liabilities of \$350.5 million, excluding interest and penalties, relating to uncertain tax positions.

Auditing the measurement of the Company's tax contingencies was challenging because the evaluation of whether a tax position is more likely than not to be sustained and the measurement of the benefit of various tax positions can be complex, involves significant judgment, and is based on interpretations of tax laws and legal rulings.

*How We
Addressed the
Matter in Our
Audit*

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's accounting process for uncertain tax positions. For example, we tested controls over management's identification of uncertain tax positions and its application of the recognition and measurement principles for uncertain tax positions.

Our audit procedures included, among others, assessing the Company's correspondence with the relevant tax authorities and evaluating income tax opinions or other third-party advice obtained by the Company. To test the Company's assessment and measurement of uncertain tax positions, we involved our tax professionals to assess whether the uncertain tax positions identified by the Company are more-likely-than-not to be sustained upon audit and, if so, to assist in testing the assumptions made by the Company in measuring the amount of tax benefit that qualifies for recognition. We also used our knowledge of, and experience with, the application of domestic and international income tax laws by the relevant income tax authorities to evaluate the Company's assessments of whether the uncertain tax position is more-likely-than-not to be sustained and, if so, the potential outcomes that could occur upon an audit by a taxing authority. We tested the completeness and accuracy of the data and calculations used to determine the amount of tax benefit to recognize. We also evaluated the adequacy of the Company's disclosures to the consolidated financial statements in relation to these matters.

Chargebacks and Product Returns

*Description of
the Matter*

As described in Note 1 to the consolidated financial statements under the caption "Revenue," net product sales include estimates of variable consideration for which accruals and allowances have been established. Variable consideration for product sales include chargebacks, which are recorded as Accrued customer programs, and product returns, which are recorded as a reduction to Accounts receivable.

Auditing the chargeback liability and product returns reserve was challenging because of the subjectivity of certain assumptions required to estimate these amounts. In particular, the accrual for chargebacks includes estimates for outstanding claims that have occurred but for which the related claim has not yet been paid and for future claims that will be made when the wholesaler inventory is sold to the indirect customer. These estimates are based on historical chargeback experience and estimated wholesaler inventory levels. In addition, the estimate of the product returns reserve is based on historical experience with actual returns and considers other factors such as levels of inventory in the distribution channel, product dating and expiration period, size and maturity of the market prior to a product launch, entrance into the market of additional competition, and changes in formulations.

*How We
Addressed the
Matter in Our
Audit*

We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company's controls addressing the risks of material misstatement for chargebacks and product returns. This included, for example, testing controls over management's review of the significant assumptions used to calculate the chargeback liabilities and product returns reserves discussed above.

To test the Company's chargeback liability and product returns reserves, we performed audit procedures that included, among others, testing the accuracy and completeness of the underlying data used in the calculations and evaluating the significant assumptions used by management to estimate its reserves. We also tested the Company's retrospective review of the accuracy of the reserves for product returns, compared the results of the retrospective review to the current year and performed analytical procedures, based on Company and external data sources, to evaluate the completeness of the reserves.

Accounting for Acquisition of Ranir*Description of the Matter*

As disclosed in Note 3 to the consolidated financial statements, the Company completed its acquisition of Ranir Global Holdings, LLC (Ranir) in 2019. The transaction was accounted for as a business combination.

The recognition and measurement of the Company's acquisition of Ranir in the 2019 consolidated financial statements was considered especially challenging and required significant auditor judgment due to the complex determination by management of the appropriate assumptions, such as discount rates, revenue growth rates, and projected profit margins, for the valuation of acquired assets, including customer relationships.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company's controls addressing the risks of material misstatement over its accounting for the Ranir acquisition. For example, we tested the effectiveness of controls over the estimation process supporting the recognition and measurement of consideration transferred and customer relationships. We also tested the effectiveness of controls over management's review of the significant assumptions used in the valuation models.

To test the Company's accounting for the Ranir acquisition, we performed audit procedures that included, among others, evaluating management's identification of assets acquired and liabilities assumed and assessing significant assumptions used for the fair value measurements, including the discount rates, revenue growth rates and projected profit margins used in valuing the customer relationships. We involved our valuation specialists to assist with the evaluation of methodologies used by the Company and significant assumptions included in the fair value estimates. We also evaluated the Company's disclosures to the consolidated financial statements.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2008.

Grand Rapids, Michigan
February 27, 2020

PERRIGO COMPANY PLC
CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions, except per share amounts)

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Net sales	\$ 4,837.4	\$ 4,731.7	\$ 4,946.2
Cost of sales	3,064.1	2,900.2	2,966.7
Gross profit	<u>1,773.3</u>	<u>1,831.5</u>	<u>1,979.5</u>
Operating expenses			
Distribution	96.1	94.2	87.0
Research and development	187.4	218.6	167.7
Selling	567.0	595.7	598.4
Administration	503.0	435.9	461.1
Impairment charges	184.5	224.4	47.5
Restructuring	26.3	21.0	61.0
Other operating expense (income)	4.2	5.2	(41.4)
Total operating expenses	<u>1,568.5</u>	<u>1,595.0</u>	<u>1,381.3</u>
Operating income	204.8	236.5	598.2
Change in financial assets	(22.1)	(188.7)	24.9
Interest expense, net	121.7	128.0	168.1
Other (income) expense, net	(66.0)	6.1	(10.1)
Loss on extinguishment of debt	0.2	0.5	135.2
Income before income taxes	<u>171.0</u>	<u>290.6</u>	<u>280.1</u>
Income tax expense	24.9	159.6	160.5
Net income	<u>\$ 146.1</u>	<u>\$ 131.0</u>	<u>\$ 119.6</u>
Earnings per share			
Basic	\$ 1.07	\$ 0.95	\$ 0.84
Diluted	\$ 1.07	\$ 0.95	\$ 0.84
Weighted-average shares outstanding			
Basic	136.0	137.8	142.3
Diluted	136.5	138.3	142.6

See accompanying Notes to Consolidated Financial Statements.

PERRIGO COMPANY PLC
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in millions)

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Net income	\$ 146.1	\$ 131.0	\$ 119.6
Other comprehensive income (loss):			
Foreign currency translation adjustments	28.4	(156.1)	328.5
Change in fair value of derivative financial instruments	28.2	(5.7)	9.7
Change in fair value of investment securities	—	—	(14.1)
Change in post-retirement and pension liability	(1.8)	(5.7)	10.8
Other comprehensive income (loss), net of tax	54.8	(167.5)	334.9
Comprehensive income (loss)	<u>\$ 200.9</u>	<u>\$ (36.5)</u>	<u>\$ 454.5</u>

See accompanying Notes to Consolidated Financial Statements.

PERRIGO COMPANY PLC
CONSOLIDATED BALANCE SHEETS
(in millions, except per share amounts)

	December 31, 2019	December 31, 2018
Assets		
Cash and cash equivalents	\$ 354.3	\$ 551.1
Accounts receivable, net of allowance for doubtful accounts of \$6.7 and \$6.4, respectively	1,243.2	1,073.1
Inventories	967.3	878.0
Prepaid expenses and other current assets	192.1	400.0
Total current assets	2,756.9	2,902.2
Property, plant and equipment, net	902.8	829.1
Operating lease assets	129.9	—
Goodwill and indefinite-lived intangible assets	4,185.5	4,029.1
Definite-lived intangible assets, net	2,921.2	2,858.9
Deferred income taxes	5.4	1.2
Other non-current assets	399.7	362.9
Total non-current assets	8,544.5	8,081.2
Total assets	\$ 11,301.4	\$ 10,983.4
Liabilities and Shareholders' Equity		
Accounts payable	\$ 520.2	\$ 474.9
Payroll and related taxes	156.4	132.1
Accrued customer programs	394.4	442.4
Other accrued liabilities	229.2	201.3
Accrued income taxes	32.2	96.5
Current indebtedness	3.4	190.2
Total current liabilities	1,335.8	1,537.4
Long-term debt, less current portion	3,365.8	3,052.2
Deferred income taxes	280.6	282.3
Other non-current liabilities	515.1	443.4
Total non-current liabilities	4,161.5	3,777.9
Total liabilities	5,497.3	5,315.3
<i>Commitments and contingencies - Refer to Note 17</i>		
Shareholders' equity		
Controlling interests:		
Preferred shares, \$0.0001 par value per share, 10 shares authorized	—	—
Ordinary shares, €0.001 par value per share, 10,000 shares authorized	7,359.9	7,421.7
Accumulated other comprehensive income	139.4	84.6
Retained earnings (accumulated deficit)	(1,695.5)	(1,838.3)
Total controlling interests	5,803.8	5,668.0
Noncontrolling interest	0.3	0.1
Total shareholders' equity	5,804.1	5,668.1
Total liabilities and shareholders' equity	\$ 11,301.4	\$ 10,983.4
Supplemental Disclosures of Balance Sheet Information		
Preferred shares, issued and outstanding	—	—
Ordinary shares, issued and outstanding	136.1	135.9

See accompanying Notes to Consolidated Financial Statements.

PERRIGO COMPANY PLC
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Cash Flows From (For) Operating Activities			
Net income	\$ 146.1	\$ 131.0	\$ 119.6
Adjustments to derive cash flows:			
Depreciation and amortization	396.5	423.6	444.8
Gain on sale of business	(71.7)	—	—
Share-based compensation	52.2	37.7	43.8
Impairment charges	184.5	224.4	47.5
Asset abandonments	11.0	—	—
Change in financial assets	(22.1)	(188.7)	24.9
Loss on extinguishment of debt	0.2	0.5	135.2
Restructuring charges	26.3	21.0	61.0
Deferred income taxes	(43.9)	(17.9)	(48.9)
Amortization of debt premium	(4.4)	(8.1)	(22.4)
Other non-cash adjustments, net	26.6	(11.1)	(2.7)
Subtotal	701.3	612.4	802.8
Increase (decrease) in cash due to:			
Accounts receivable	(140.7)	21.0	3.2
Inventories	(67.0)	(98.6)	(16.0)
Accounts payable	17.0	28.8	(39.6)
Payroll and related taxes	(3.7)	(34.5)	(27.4)
Accrued customer programs	(48.6)	25.5	34.6
Accrued liabilities	(23.2)	(20.9)	(47.8)
Accrued income taxes	(74.5)	68.1	(6.1)
Other, net	27.2	(8.8)	(4.8)
Subtotal	(313.5)	(19.4)	(103.9)
Net cash from operating activities	387.8	593.0	698.9
Cash Flows From (For) Investing Activities			
Proceeds from royalty rights	2.9	13.7	87.3
Acquisitions of businesses, net of cash acquired	(747.7)	—	(0.4)
Asset acquisitions	(149.1)	(35.6)	—
Purchase of investment securities	—	(7.5)	—
Proceeds from the Royalty Pharma contingent milestone	250.0	—	—
Additions to property, plant and equipment	(137.7)	(102.6)	(88.6)
Net proceeds from sale of business	182.5	5.2	154.6
Proceeds from sale of the Tysabri® financial asset	—	—	2,200.0
Other investing, net	3.0	—	(14.8)
Net cash from (for) investing activities	(596.1)	(126.8)	2,338.1
Cash Flows From (For) Financing Activities			
Borrowings (repayments) of revolving credit agreements and other financing, net	0.5	(4.4)	6.8
Issuances of long-term debt	600.0	431.0	—
Payments on long-term debt	(476.0)	(482.5)	(2,611.0)
Premiums on early debt retirement	—	—	(116.1)
Deferred financing fees	(1.0)	(2.4)	(4.8)
Issuance of ordinary shares	0.9	1.3	0.7
Repurchase of ordinary shares	—	(400.0)	(191.5)
Cash dividends	(112.4)	(104.9)	(91.1)
Other financing, net	(10.2)	(10.0)	2.3
Net cash from (for) financing activities	1.8	(571.9)	(3,004.7)
Effect of exchange rate changes on cash and cash equivalents	9.7	(21.9)	24.1
Net increase (decrease) in cash and cash equivalents	(196.8)	(127.6)	56.4
Cash and cash equivalents, beginning of period	551.1	678.7	622.3
Cash and cash equivalents, end of period	\$ 354.3	\$ 551.1	\$ 678.7

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Supplemental Disclosures of Cash Flow Information			
Cash paid/received during the year for:			
Interest paid	\$ 136.8	\$ 133.8	\$ 187.6
Interest received	\$ 15.1	\$ 5.0	\$ 9.3
Income taxes paid	\$ 136.2	\$ 144.2	\$ 186.9
Income taxes refunded	\$ 28.0	\$ 5.1	\$ 3.6

See accompanying Notes to Consolidated Financial Statements.

PERRIGO COMPANY PLC
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in millions, except per share amounts)

	Ordinary Shares Issued		Accumulated Other Comprehensive Income	Retained Earnings (Accumulated Deficit)	Total
	Shares	Amount			
Balance at December 31, 2016	143.4	\$ 8,135.0	\$ (81.8)	\$ (2,095.1)	\$ 5,958.1
Net income	—	—	—	119.6	119.6
Other comprehensive income	—	—	334.9	—	334.9
Issuance of ordinary shares under:					
Stock options	0.1	0.7	—	—	0.7
Restricted stock plan	0.1	—	—	—	—
Compensation for stock options	—	8.9	—	—	8.9
Compensation for restricted stock	—	34.9	—	—	34.9
Cash dividends, \$0.64 per share	—	(91.1)	—	—	(91.1)
Shares withheld for payment of employees' withholding tax liability	(0.1)	(4.0)	—	—	(4.0)
Repurchases of ordinary shares	(2.7)	(191.5)	—	—	(191.5)
Balance at December 31, 2017	140.8	7,892.9	253.1	(1,975.5)	6,170.5
Adoption of new accounting standards	—	—	(1.0)	6.2	5.2
Net income	—	—	—	131.0	131.0
Other comprehensive loss	—	—	(167.5)	—	(167.5)
Issuance of ordinary shares under:					
Stock options	0.1	1.3	—	—	1.3
Restricted stock plan	0.2	—	—	—	—
Compensation for stock options	—	8.1	—	—	8.1
Compensation for restricted stock	—	29.6	—	—	29.6
Cash dividends, \$0.76 per share	—	(104.9)	—	—	(104.9)
Shares withheld for payment of employees' withholding tax liability	(0.1)	(5.3)	—	—	(5.3)
Repurchases of ordinary shares	(5.1)	(400.0)	—	—	(400.0)
Balance at December 31, 2018	135.9	7,421.7	84.6	(1,838.3)	5,668.0
Adoption of new accounting standards	—	—	—	(3.3)	(3.3)
Net income	—	—	—	146.1	146.1
Other comprehensive income	—	—	54.8	—	54.8
Issuance of ordinary shares under:					
Stock options	—	0.9	—	—	0.9
Restricted stock plan	0.3	—	—	—	—
Compensation for stock options	—	4.7	—	—	4.7
Compensation for restricted stock	—	50.6	—	—	50.6
Cash dividends, \$0.82 per share	—	(112.4)	—	—	(112.4)
Shares withheld for payment of employees' withholding tax liability	(0.1)	(5.6)	—	—	(5.6)
Balance at December 31, 2019	136.1	\$ 7,359.9	\$ 139.4	\$ (1,695.5)	\$ 5,803.8

See accompanying Notes to Consolidated Financial Statements.

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

General Information

The Company

Perrigo Company plc was incorporated under the laws of Ireland on June 28, 2013 and became the successor registrant of Perrigo Company, a Michigan corporation, on December 18, 2013 in connection with the acquisition of Elan Corporation, plc ("Elan"). Unless the context requires otherwise, the terms "Perrigo," the "Company," "we," "our," "us," and similar pronouns used herein refer to Perrigo Company plc, its subsidiaries, and all predecessors of Perrigo Company plc and its subsidiaries.

We are dedicated to making lives better by bringing "Quality, Affordable Self-Care Products™" that consumers trust everywhere they are sold. We are a leading provider of over-the-counter ("OTC") health and wellness solutions that enhance individual well-being by empowering consumers to proactively prevent or treat conditions that can be self-managed. We are also a leading producer of generic prescription pharmaceutical topical products such as creams, lotions, gels, and nasal sprays.

Basis of Presentation

Our fiscal year begins on January 1 and ends on December 31 of each year. We end our quarterly accounting periods on the Saturday closest to the end of the calendar quarter, with the fourth quarter ending on December 31 of each year.

Segment Reporting

During the three months ended March 30, 2019, we changed the composition of our operating and reporting segments. We moved our pharmaceuticals and diagnostic businesses in Israel from the Consumer Self-Care International segment to the Prescription Pharmaceuticals segment and we made certain adjustments to our allocations between segments. These changes were made to reflect changes in the way in which management makes operating decisions, allocates resources, and manages the growth and profitability of the Company. Financial information related to our business segments and geographic locations can be found in Note 2 and Note 20. Our new reporting and operating segments are as follows:

- **Consumer Self-Care Americas ("CSCA")**, formerly Consumer Healthcare Americas, comprises our consumer self-care business (OTC, contract manufacturing, infant formula, and oral self-care categories and our divested animal health category) in the U.S., Mexico and Canada.
- **Consumer Self-Care International ("CSCI")**, formerly Consumer Healthcare International, comprises our branded consumer self-care business primarily in Europe and Australia, our consumer-focused business in the United Kingdom and parts of Asia, and our liquid licensed products business in the United Kingdom.
- **Prescription Pharmaceuticals ("RX")** comprises our prescription pharmaceuticals business in the U.S. and our pharmaceuticals and diagnostic businesses in Israel, which were previously in our CSCI segment.

Principles of Consolidation

The consolidated financial statements include our accounts and accounts of all majority-owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation.

Unconsolidated Variable Interest Entities

We have research and development ("R&D") arrangements with certain biotechnology companies that we determined to be variable interest entities ("VIEs"). We did not consolidate the VIEs in our financial statements because we lack the power to direct the activities that most significantly impact their economic performance and thus are not considered the primary beneficiaries of these entities. These arrangements provide us with certain rights and obligations to purchase product candidates from the VIEs, dependent upon the outcome of the development activities.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions, which affect the reported earnings, financial position and various disclosures. Although the estimates are considered reasonable, actual results could differ from the estimates.

Non-U.S. Operations

We translate our non-U.S. dollar-denominated operations' assets and liabilities into U.S. dollars at current rates of exchange as of the balance sheet date and income and expense items at the average exchange rate for the reporting period. Translation adjustments resulting from exchange rate fluctuations are recorded in the cumulative translation account, a component of Accumulated other comprehensive income (loss) ("AOCI"). Gains or losses from foreign currency transactions are included in Other (income) expense, net.

Revenue

Product Revenue

We generally recognize product revenue for our contract performance obligations at a point in time, typically upon shipment or delivery of products to customers. For point in time customers for which control transfers on delivery to the customer due to free on board destination terms ("FOB"), an adjustment is recorded to defer revenue recognition over an estimate of days until control transfers at the point of delivery. Where we recognize revenue at a point in time, the transfer of title is the primary indicator that control has transferred. In other limited instances, primarily relating to those contracts that relate to contract manufacturing performed for our customers and certain store branded products, control transfers as the product is manufactured. Control is deemed to transfer over time for these contracts as the product does not have an alternative use and we have a contractual right to payment for performance completed to date. Revenue for contract manufacturing contracts is recognized over the transfer period using an input method that measures progress towards completion of the performance obligation as costs are incurred. For store branded product revenue recognized over time, an output method is used to recognize revenue when production of a unit is completed because product customization occurs when the product is packaged as a finished good under the store brand label of the customer.

Net product sales include estimates of variable consideration for which accruals and allowances are established. Variable consideration for product sales consists primarily of chargebacks, rebates, and administrative fees and other incentive programs recorded on the Consolidated Balance Sheets as Accrued customer programs, and sales returns and shelf stock allowances recorded on the Consolidated Balance Sheets as a reduction to Accounts receivable. Where appropriate, these estimates take into consideration a range of possible outcomes in which relevant factors, such as historical experience, current contractual and statutory requirements, specific known market events and trends, industry data and forecasted customer buying and payment patterns, are either probability weighted to derive an estimate of expected value or the estimate reflects the single most likely outcome. Overall, these reserves reflect the best estimates of the amount of consideration to which we are entitled based on the terms of the contract. Actual amounts of consideration ultimately received may differ from our estimates. If actual results in the future vary from the estimates, these estimates are adjusted, which would affect revenue and earnings in the period such variances become known. Accrued customer programs and allowances were \$483.7 million and \$534.8 million at December 31, 2019 and December 31, 2018, respectively.

Other Revenue Policies

We receive payments from our customers based on billing schedules established in each contract. Amounts are recorded as accounts receivable when our right to consideration is unconditional. In most cases, the timing of the unconditional right to payment aligns with shipment or delivery of the product and the recognition of revenue; however, for those customers where revenue is recognized at a time prior to shipment or delivery due to over time revenue recognition, a contract asset is recorded and is reclassified to accounts receivable when it becomes unconditional under the contract upon shipment or delivery to the customer.

Our performance obligations are generally expected to be fulfilled in less than one year. Therefore, we do not provide quantitative information about remaining performance obligations.

We do not assess whether a contract has a significant financing component if the expectation at contract inception is such that the period between payment by the customer and the transfer of the promised products to the customer will be one year or less, which is the case with substantially all customers.

Taxes collected from customers relating to product sales and remitted to governmental authorities are excluded from revenue.

Shipping and handling costs billed to customers are included in Net sales. Conversely, shipping and handling expenses we incur are included in Cost of sales.

Cash and Cash Equivalents

Cash and cash equivalents consist primarily of demand deposits and other short-term investments with maturities of three months or less at the date of purchase. The carrying amount of cash and cash equivalents approximates its fair value.

Inventories

Inventories are stated at the lower of cost or net realizable value. Cost is determined using the first-in first-out method. Costs include material and conversion costs. Inventory related to R&D is expensed when it is determined the materials have no alternative future use.

We maintain reserves for estimated obsolete or unmarketable inventory based on the difference between the cost of the inventory and its estimated net realizable value. In estimating the reserves, management considers factors such as excess or slow-moving inventories, product expiration dating, products on quality hold, current and future customer demand and market conditions. Changes in these conditions may result in additional reserves (refer to [Note 6](#)).

Investments

Fair Value Method Investments

Equity investments in which we own less than a 20% interest and cannot exert significant influence are recorded at fair value with unrealized gains and losses included in net income. For equity investments without readily determinable fair values, we may use the Net Asset Value ("NAV") per share as a practical expedient to measure the fair value, if eligible. If the NAV practical expedient cannot be applied, we may elect to use a measurement alternative until the investment's fair value becomes readily determinable. Under the alternative method, the equity investments are accounted for at cost, less any impairment, plus or minus changes resulting from observable price changes in an orderly transaction for an identical or similar investment of the same issuer.

Equity Method Investments

The equity method of accounting is used for unconsolidated entities over which we have significant influence; generally, this represents ownership interests of at least 20% and not more than 50%. Under the equity method of accounting, we record the investments at carrying value and adjust for a proportionate share of the profits and losses of these entities each period. We evaluate our equity method investments for recoverability. If we determine that a loss in the value of an investment is other than temporary, the investment is written down to its estimated fair value. Evaluations of recoverability are based primarily on projected cash flows.

For more information on our investments, refer to [Note 8](#).

Derivative Instruments

On January 1, 2019, we adopted Accounting Standards Update No. 2017-12 Targeted Improvements to Accounting for Hedging Activities ("ASU 2017-12") using a modified retrospective approach. Among other provisions, the new standard required modifications to existing presentation and disclosure requirements on a prospective basis. As such, disclosures for the year ended December 31, 2018 conform to the disclosure requirements prior to the adoption of ASU 2017-12.

Prior to the adoption of ASU 2017-12, we were required to separately measure and reflect the amount by which the hedging instrument did not offset the changes in the fair value or cash flows of hedged items, which was referred to as the ineffective amount. We assessed hedge effectiveness on a quarterly basis and recorded the gain or loss related to the ineffective portion of derivative instruments, if any, in Other (income) expense, net on the Consolidated Statements of Operations. Pursuant to the provisions of ASU 2017-12, we are no longer required to separately measure and recognize hedge ineffectiveness. Therefore, we no longer recognize hedge ineffectiveness separately on our Consolidated Statements of Operations, but instead recognize the entire change in the fair value of:

- Cash flow hedges included in the assessment of hedge effectiveness in Other Comprehensive Income ("OCI"). The amounts recorded in OCI will subsequently be reclassified to earnings in the same line item on the Consolidated Statements of Operations as impacted by the hedged item when the hedged item affects earnings; and
- Fair value hedges included in the assessment of hedge effectiveness in the same line item on the Consolidated Statements of Operations that is used to present the earnings effect of the hedged item.

Prior to the adoption of ASU 2017-12, we excluded option premiums and forward points (excluded components) from our assessment of hedge effectiveness for our foreign exchange cash flow hedges. We recognized all changes in fair value of the excluded components in Other (income) expense, net, on the Consolidated Statements of Operations. The amendments in ASU 2017-12 continue to allow those components to be excluded from the assessment of hedge effectiveness and add cross-currency basis spread as an allowable excluded component for cash flow and fair value hedges. The provisions of ASU 2017-12 allow a policy election to either continue to recognize changes in the fair value of the excluded components currently in earnings or to recognize the initial value of the excluded component using an amortization approach. For our cash flow hedges, we have elected to recognize the initial value of the excluded component on a straight-line basis over the life of the derivative instrument, within the same line item on the Consolidated Statements of Operations that is used to present the earnings effect of the hedged item. The cumulative effect adjustment between Accumulated Other Comprehensive Income ("AOCI") and Retained earnings (accumulated deficit) from applying this policy on existing hedges at the date of adoption was immaterial.

We record derivative instruments on the balance sheet on a gross basis as either an asset or liability measured at fair value (refer to [Note 7](#)). Additionally, changes in a derivative's fair value, which are measured at the end of each period, are recognized in earnings unless a derivative can be designated in a qualifying hedging relationship. All realized and unrealized gains and losses are included within operating activities in the Consolidated Statements of Cash Flows.

Designated derivatives meet hedge accounting criteria, which means the fair value of the hedge is recorded in shareholders' equity as a component of OCI, net of tax. The deferred gains and losses are recognized in income in the period in which the hedged item affects earnings. All of our designated derivatives are assessed for hedge effectiveness quarterly.

We also have economic non-designated derivatives that do not meet hedge accounting criteria. These derivative instruments are adjusted to current market value at the end of each period through earnings. Gains or losses on these instruments are offset substantially by the remeasurement adjustment on the hedged item.

We are exposed to credit loss in the event of nonperformance by the counterparties on derivative contracts. It is our policy to manage our credit risk on these transactions by dealing only with financial institutions having a long-term credit rating of "Aa3" or better and by distributing the contracts among several financial institutions to

diversify credit concentration risk. Should a counterparty default, our maximum exposure to loss is the asset balance of the instrument. The maximum term of our forward currency exchange contracts is 18 months.

We enter into certain derivative financial instruments, when available on a cost-effective basis, to mitigate our risk associated with changes in interest rates and foreign currency exchange rates as follows:

Interest rate risk management - We are exposed to the impact of interest rate changes through our cash investments and borrowings. We utilize a variety of strategies to manage the impact of changes in interest rates including using a mix of debt maturities along with both fixed-rate and variable-rate debt. In addition, we may enter into treasury-lock agreements and interest rate swap agreements on certain investing and borrowing transactions to manage our exposure to interest rate changes and our overall cost of borrowing.

Foreign currency exchange risk management - We conduct business in several major currencies other than the U.S. dollar and are subject to risks associated with changing foreign exchange rates. Our objective is to reduce cash flow volatility associated with foreign exchange rate changes on a consolidated basis to allow management to focus its attention on business operations. Accordingly, we enter into various contracts that change in value as foreign exchange rates change to protect the value of existing foreign currency assets and liabilities, commitments, and anticipated foreign currency sales and expenses.

Interest rate swaps - Interest rate swap agreements are contracts to exchange floating rate for fixed rate payments (or vice versa) over the life of the agreement without the exchange of the underlying notional amounts. The notional amounts of the interest rate swap agreements are used to measure interest to be paid or received and do not represent the amount of exposure to credit loss. The differential paid or received on the interest rate swap agreements is recognized as an adjustment to interest expense.

Cross currency swaps - In a cross currency swap, interest payments and principal in one currency are exchanged for principal and interest payments in a different currency. Interest payments are exchanged at fixed intervals during the life of the agreement. Changes in the fair value of these swaps are recorded in equity as a component of AOCI in the same manner as foreign currency translation adjustments. In assessing the effectiveness of these hedges, we use a method based on changes in spot rates to measure the impact of the foreign currency exchange rate fluctuations on both our foreign subsidiary net investment and the related swap. Under this method, changes in the fair value of the hedging instrument, other than those due to changes in the spot rate, are initially recorded in AOCI as a translation adjustment. The excluded component is recognized on a systematic and rational basis by accruing the swap payments and receipts within Interest expense, net. Changes in the fair value associated with the effective portion (i.e. those changes due to the spot rate) are recorded in AOCI as a translation adjustment and are released and recognized in earnings only upon the sale or liquidation of the hedged net investment.

All derivative instruments are managed on a consolidated basis to efficiently net exposures and thus take advantage of any natural offsets. Gains and losses related to the derivative instruments are expected to be offset largely by gains and losses on the original underlying asset or liability. We do not use derivative financial instruments for speculative purposes.

The impact of gains and losses on foreign exchange contracts not designated as hedging instruments related to changes in the fair value of assets and liabilities denominated in foreign currencies are generally offset by net foreign exchange gains and losses, which are also included on the Consolidated Statements of Operations in Other (income) expense, net for all periods presented. When we enter into foreign exchange contracts not designated as hedging instruments to mitigate the impact of exchange rate volatility in the translation of foreign earnings, gains and losses will generally be offset by fluctuations in the U.S. dollar-translated amounts of each Income Statement account in current and/or future periods.

For more information on our derivatives, refer to [Note 9](#).

Property, Plant and Equipment, net

Property, plant and equipment, net is recorded at cost and is depreciated using the straight-line method. Useful lives for financial reporting range from 3 to 20 years for machinery and equipment and 10 to 45 years for

buildings. Maintenance and repair costs are charged to earnings, while expenditures that increase asset lives are capitalized. Depreciation expense includes amortization of assets recorded under finance leases and totaled \$91.0 million, \$90.0 million, and \$95.2 million for the years ended December 31, 2019, December 31, 2018, and December 31, 2017, respectively.

We held the following property, plant and equipment, net (in millions):

	December 31, 2019	December 31, 2018
Land	\$ 50.4	\$ 49.0
Buildings	578.7	552.3
Machinery and equipment	1,195.8	1,079.3
Gross property, plant and equipment	1,824.9	1,680.6
Less accumulated depreciation	(922.1)	(851.5)
Property, plant and equipment, net	<u>\$ 902.8</u>	<u>\$ 829.1</u>

Leases

We adopted ASU 2016-02, Leases, as of January 1, 2019, using the modified retrospective transition approach, with a cumulative-effect adjustment to the opening balance of retained earnings as of the effective date. The financial results reported in periods prior to 2019 are unchanged. In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which, among other things, allowed us to carry forward the historical lease classification.

Adoption of the new standard resulted in additional operating lease liabilities and lease assets, including the transition of existing capital lease liabilities and lease assets to finance classification, of approximately \$166.5 million and \$164.0 million, respectively, as of January 1, 2019. Upon adoption, there were two primary reasons for the differences between the lease assets and liabilities recognized: (1) the transition requirement to reduce the operating lease asset carrying value by the deferred lease liabilities that existed prior to the adoption date; and (2) the transition of capital leases to finance leases which occurred at their existing carrying values. Additionally, historical build-to-suit assets and liabilities were removed on transition and recorded as an adjustment to retained earnings, net of deferred tax impact. The standard did not materially impact our consolidated net income or cash flow classification.

We lease certain office buildings, warehouse facilities, vehicles, and plant, office, and computer equipment. Lease assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease.

We evaluate arrangements at inception to determine if lease components are included. An arrangement includes a lease component if it identifies an asset and we have control over the asset. For new leases beginning January 1, 2019 or later, we have elected not to separate lease components from the non-lease components included in an arrangement when measuring the leased asset and leased liability for all asset classes.

Lease assets and liabilities are recognized at the lease commencement date based on the estimated present value of lease payments over the lease term. Leases with an initial term of 12 months or less are not recorded on the balance sheet. We recognize lease expense for leases on a straight-line basis over the lease term. We apply the portfolio approach to certain groups of computer equipment and vehicle leases when the term, classification, and asset type are identical. The discount rate selected is the incremental borrowing rate we would obtain for a secured financing of the lease asset over a similar term.

Many of our leases include one or more options to extend the lease term. Certain leases also include options to terminate early or purchase the leased property, all of which are executed at our sole discretion. Optional periods may be included in the lease term and measured as part of the lease asset and lease liability if we are reasonably certain to exercise our right to use the leased asset during the optional periods. We generally consider renewal options to be reasonably certain of execution and included in the lease term when significant leasehold improvements have been made by us to the leased assets. The depreciable lives of assets and leasehold

improvements are limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise.

Certain of our lease agreements include contingent rental payments based on per unit usage over contractual levels (e.g., miles driven or machine hours used) and others include rental payments adjusted periodically for market reviews or inflationary indexes. Our lease agreements do not contain any material residual value guarantees or material restrictive covenants.

For more information on our leases, refer to [Note 10](#).

Goodwill and Intangible Assets

Goodwill

Goodwill represents amounts paid for an acquisition in excess of the fair value of net assets acquired. Goodwill is tested for impairment annually on the first day of our fourth quarter, or more frequently if changes in circumstances or the occurrence of events suggest an impairment exists.

The test for impairment requires us to make several estimates about fair value, most of which are based on projected future cash flows and market valuation multiples. The estimates associated with the goodwill impairment tests are considered critical due to the judgments required in determining fair value amounts, including projected discounted future cash flows. Changes in these estimates may result in the recognition of an impairment loss. We have six reporting units that are evaluated for impairment.

Intangible Assets

We have intangible assets that we have acquired through various business acquisitions and include trademarks, trade names and brands, in-process research and development ("IPR&D"), developed product technology/formulation and product rights, distribution and license agreements, customer relationships and distribution networks, and non-compete agreements. The assets are typically valued initially using the relief from royalty method or the multi-period excess earnings method ("MPEEM").

We test indefinite-lived trademarks, trade names, and brands for impairment annually, or more frequently if changes in circumstances or the occurrence of events suggest impairment exists, by comparing the carrying value of the assets to their estimated fair values. An impairment loss is recognized if the carrying amount of the asset exceeds its fair value.

Definite-lived intangible assets consist of a portfolio of developed product technology/formulation and product rights, distribution and license agreements, customer relationships, non-compete agreements, and certain trademarks, trade names, and brands. The assets are amortized on either a straight-line basis or proportionately to the benefits derived from those relationships or agreements. Useful lives vary by asset type and are determined based on the period over which the intangible asset is expected to contribute directly or indirectly to our future cash flows. We also review all other long-lived assets that have finite lives and that are not held for sale for impairment when indicators of impairment are evident by comparing the carrying value of the assets to their estimated future undiscounted cash flows.

IPR&D assets are recognized at fair value and are classified as indefinite-lived assets until the successful completion or abandonment of the associated R&D efforts. If the associated R&D is completed, the IPR&D asset becomes a definite-lived intangible asset and is amortized over the asset's assigned useful life. If it is abandoned, an impairment loss is recorded.

Goodwill, indefinite-lived intangible asset, and definite-lived intangible asset impairments are recorded in Impairment charges on the Consolidated Statement of Operations. See [Note 4](#) for further information on our goodwill and intangible assets.

Share-Based Awards

We measure and record compensation expense for all share-based awards based on estimated grant date fair values. For awards with only service conditions that are based on graded vesting schedules, we recognize the compensation expense on a straight-line basis over the entire award. Forfeitures on share-based awards are recognized in compensation expense in the period in which they occur.

We estimate the fair value of stock option awards granted based on the Black-Scholes option pricing model, which requires the use of subjective and complex assumptions. These assumptions include estimating the expected term that awards granted are expected to be outstanding, the expected volatility of our stock price for a period commensurate with the expected term of the related options, and the risk-free rate with a maturity closest to the expected term of the related awards. Restricted stock and restricted stock units are valued based on our stock price on the day the awards are granted. The estimated fair value of outstanding Relative Total Shareholder Return performance units ("RTSR") is based on the grant date fair value of RTSR awards using a Monte Carlo simulation, which includes estimating the movement of stock prices and the effects of volatility, interest rates, and dividends (refer to [Note 13](#)).

Income Taxes

We record deferred income tax assets and liabilities on the balance sheet as noncurrent based upon the difference between the financial reporting and the tax reporting basis of assets and liabilities using the enacted tax rates. To the extent that available evidence raises doubt about the realization of a deferred income tax asset, a valuation allowance is established.

We have provided for income taxes for certain earnings of certain foreign subsidiaries which have not been deemed to be permanently reinvested. For those foreign subsidiaries we have deemed to be permanently reinvested, we have provided no further tax provision.

We record reserves for uncertain tax positions to the extent it is more likely than not that the tax authority position will be sustained on audit, based on the technical merits of the position. Periodic changes in reserves for uncertain tax positions are reflected in the provision for income taxes. We include interest and penalties attributable to uncertain tax positions and income taxes as a component of our income tax provision (refer to [Note 15](#)).

Legal Contingencies

We are involved in product liability, patent, commercial, regulatory and other legal proceedings that arise in the normal course of business. We record a liability when a loss is considered probable and the amount can be reasonably estimated. If the reasonable estimate of a probable loss is a range and no amount within that range is a better estimate, the minimum amount in the range is accrued. If a loss is not probable or a probable loss cannot be reasonably estimated, no liability is recorded. We have established reserves for certain of our legal matters (refer to [Note 17](#)). We do not incorporate insurance recoveries into our reserves for legal contingencies. We separately record receivables for amounts due under insurance policies when we consider the realization of recoveries for claims to be probable, which may be different than the timing in which we establish the loss reserves.

Research and Development

All R&D costs, including payments related to products under development and research consulting agreements, are expensed as incurred. We incur costs throughout the development cycle, including costs for research, clinical trials, manufacturing validation, and other pre-commercialization approval costs that are included in R&D. We may continue to make non-refundable payments to third parties for new technologies and for R&D work that has been completed. These payments may be expensed at the time of payment depending on the nature of the payment made. R&D expense was \$187.4 million, \$218.6 million, and \$167.7 million, for the years ended December 31, 2019, December 31, 2018 and December 31, 2017, respectively. During the year ended December 31, 2018, we paid an up-front license fee of \$50.0 million allowing us to develop and commercialize an OTC version of Nasonex-branded products (refer to [Note 3](#)).

We actively collaborate with other pharmaceutical companies to develop, manufacture and market certain products or groups of products. We may choose to enter into these types of agreements to, among other things, leverage our or others' scientific research and development expertise or utilize our extensive marketing and distribution resources. Our policy on accounting for costs of strategic collaborations determines the timing of the recognition of certain development costs. In addition, this policy determines whether the cost is classified as a development expense or capitalized as an asset. Management is required to form judgments with respect to the commercial status of such products in determining whether development costs meet the criteria for immediate expense or capitalization. For example, when we acquire certain products for which there is already an Abbreviated New Drug Application ("ANDA") or New Drug Application ("NDA") approval directly related to the product, and there is net realizable value based on projected sales for these products, we capitalize the amount paid as an intangible asset. If we acquire product rights that are in the development phase and as to which we have no assurance that the third party will successfully complete its development milestones, we expense the amount paid (refer to [Note 18](#)).

Advertising Costs

Advertising costs relate primarily to print advertising, direct mail, on-line advertising, social media communications, and television advertising and are expensed as incurred. For the year ended December 31, 2019, 90% of advertising expense was attributable to our CSCI segment. Advertising costs were as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 142.8	\$ 159.2	\$ 145.3

Earnings per Share ("EPS")

Basic EPS is calculated using the weighted-average number of ordinary shares outstanding during each period. It excludes both the dilutive effects of additional common shares that would have been outstanding if the shares issued under stock incentive plans had been exercised and the dilutive effect of restricted share units, to the extent those shares and units have not vested. Diluted EPS is calculated including the effects of shares and potential shares issued under stock incentive plans, following the treasury stock method.

Defined Benefit Plans

We operate a number of defined benefit plans for employees globally.

Two significant assumptions, the discount rate and the expected rate of return on plan assets, are important elements of expense and liability measurement. We evaluate these assumptions annually. Other assumptions involve employee demographic factors, such as retirement patterns, mortality, turnover, and the rate of compensation increase.

The liability recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date less the fair value of plan assets. The defined benefit obligation is calculated periodically by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of either high quality corporate bonds or long term government bonds depending on the depth and liquidity of the high quality corporate bond market in the different geographies where we have pension liabilities. The bonds are denominated in the currency in which the benefits will be paid and have terms to maturity approximating the terms of the related pension liability.

Actuarial gains and losses are recognized on the Consolidated Statement of Operations using the corridor method. Under the corridor method, to the extent that any cumulative unrecognized net actuarial gain or loss exceeds 10% of the greater of the present value of the defined benefit obligation and the fair value of the plan assets, that portion is recognized over the expected average remaining working lives of the plan participants. Otherwise, the net actuarial gain or loss is recorded in OCI. We recognize the funded status of benefit plans on the

Consolidated Balance Sheets. In addition, we recognize the gains or losses and prior service costs or credits that arise during the period but are not recognized as components of net periodic pension cost of the period as a component of OCI (refer to [Note 16](#)).

Recent Accounting Standard Pronouncements

Below are recent Accounting Standard Updates ("ASU") that we are assessing to determine the effect on our Consolidated Financial Statements. We do not believe that any other recently issued accounting standards could have a material effect on our Consolidated Financial Statements. As new accounting pronouncements are issued, we will adopt those that are applicable under the circumstances.

Recently Issued Accounting Standards Not Yet Adopted

Standard	Description	Effective Date	Effect on the Financial Statements or Other Significant Matters
ASU 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	This guidance requires a customer in a cloud computing arrangement that is a service contract to follow the internal-use software guidance in ASC 350-40 to determine which implementation costs to capitalize as assets or expense as incurred.	January 1, 2020	We currently plan to adopt the standard prospectively on the effective date. Upon adoption, no impact is currently expected, however, future hosting arrangements treated as service contracts will need to be evaluated for capitalizable costs during implementation. The Consolidated Financial Statement impact will align with the presentation of the underlying hosting contracts, which will be included within Operating expenses.
ASU 2018-13: Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement	This guidance amends ASC 820 to add, remove, and modify certain disclosure requirements for fair value measurements.	January 1, 2020	We currently plan to adopt the standard on the effective date. Upon adoption, we will be required to disclose the range and weighted average used to develop significant unobservable inputs for Level 3 fair value measurement. We will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy.
ASU 2016-13: Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments	This guidance changes the impairment model for most financial assets and certain other instruments, replacing the current "incurred loss" approach with an "expected loss" credit impairment model, which will apply to most financial assets measured at amortized cost and certain other instruments, including trade and other receivables, loans, held-to-maturity debt securities, and off-balance sheet credit exposures such as letters of credit.	January 1, 2020	We currently plan to adopt the standard on the effective date. Upon adoption, we do not expect a material impact on the Consolidated Financial Statements.
ASU 2018-19: Codification Improvements for Topic 326: Measurement of Credit Losses on Financial Instruments			
ASU 2019-05: Financial Instruments-Credit Losses: Targeted Transition Relief			
ASU 2019-11: Codification Improvements for Topic 326: Measurement of Credit Losses on Financial Instruments			
ASU 2018-18: Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606	This guidance amends ASC 808 to clarify that certain transactions between participants in a collaborative arrangement should be accounted for under ASC 606 when the counterparty is a customer. The proposed guidance would be applied retrospectively to the date of initial adoption of Topic 606.	January 1, 2020	We currently plan to adopt the standard on the effective date. Upon adoption, we do not expect a material impact on the Consolidated Financial Statements.

Recently Issued Accounting Standards Not Yet Adopted (continued)

Standard	Description	Effective Date	Effect on the Financial Statements or Other Significant Matters
ASU 2019-08: Stock Compensation (Topic 718) and Revenue from Contracts with Customers (Topic 606): Share-Based Consideration Payable to a Customer	This guidance requires the application of guidance in Topic 718 when measuring and classifying share-based payments to a customer.	January 1, 2020	We currently plan to adopt the standard on the effective date. Upon adoption, we do not expect a material impact on the Consolidated Financial Statements.
ASU 2018-14: Compensation-Retirement Benefits-Defined Benefit Plans-General (Subtopic 715-20): Disclosure Framework-Changes to the Disclosure Requirements for Defined Benefit Plans	This guidance amends ASC 715 to add, remove, and clarify disclosure requirements related to defined benefit pension and other post-retirement plans.	December 31, 2020	We are currently evaluating the implications of adoption on our Consolidated Financial Statements.
ASU 2019-12: Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes	This guidance enhances and simplifies various aspects of the income tax accounting guidance in ASC 740.	January 1, 2021	We are currently evaluating the implications of adoption on our Consolidated Financial Statements.

NOTE 2 - REVENUE RECOGNITION

Revenue is recognized when or as a customer obtains control of promised products. The amount of revenue recognized reflects the consideration we expect to be entitled to receive in exchange for these products.

Disaggregation of Revenue

We generated third-party revenue in the following geographic locations⁽¹⁾ during each of the periods presented below (in millions):

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
U.S.	\$ 3,225.6	\$ 3,098.3	\$ 3,272.3
Europe ⁽²⁾	1,335.8	1,347.6	1,343.6
All other countries ⁽³⁾	276.0	285.8	330.3
Total net sales	<u>\$ 4,837.4</u>	<u>\$ 4,731.7</u>	<u>\$ 4,946.2</u>

(1) The net sales by geography is derived from the location of the entity that sells to a third party.

(2) Includes Ireland net sales of \$23.4 million, \$25.7 million, and \$30.4 million for the years ended December 31, 2019, December 31, 2018, and December 31, 2017, respectively.

(3) Includes revenue generated primarily in Israel, Mexico, Australia, and Canada.

Product Category

We re-aligned our product categories in our CSCA and CSCI segments as of December 31, 2019. The re-alignment standardizes our categories and product level detail to provide consistency. This transformative step will optimize the way in which management reports and evaluates our business.

The following is a summary of our revenue by category (in millions), comparative periods reflect the product category re-alignment:

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
CSCA⁽¹⁾			
Upper respiratory	\$ 515.2	\$ 492.5	\$ 485.4
Digestive health	413.9	403.6	411.5
Nutrition	394.4	432.4	423.6
Pain and sleep-aids	383.6	388.1	364.8
Healthy lifestyle	352.4	333.6	341.0
Skincare and personal hygiene	182.9	164.1	163.5
Oral self-care	106.4	—	—
Animal health	43.7	93.9	141.3
Vitamins, minerals, and supplements	28.6	26.1	38.0
Other CSCA ⁽²⁾	66.6	77.3	60.8
Total CSCA	2,487.7	2,411.6	2,429.9
CSCI			
Skincare and personal hygiene	371.6	396.5	401.8
Upper respiratory	276.8	276.5	270.8
Vitamins, minerals, and supplements	180.2	187.2	177.9
Healthy lifestyle	173.8	180.7	182.5
Pain and sleep-aids	167.9	170.0	150.8
Oral self-care	51.2	8.9	11.0
Digestive health	27.1	29.5	29.2
Other CSCI ⁽³⁾	133.6	150.0	182.2
Total CSCI	1,382.2	1,399.3	1,406.2
RX	967.5	920.8	1,054.4
Other	—	—	55.7
Total net sales	\$ 4,837.4	\$ 4,731.7	\$ 4,946.2

(1) Includes net sales from our OTC contract manufacturing business.

(2) Consists primarily of diagnostic products and other miscellaneous or otherwise uncategorized product lines and markets, none of which is greater than 10% of the segment net sales.

(3) Consists primarily of liquid licensed products, our distribution business and other miscellaneous or otherwise uncategorized product lines and markets, none of which is greater than 10% of the segment net sales.

While the majority of revenue is recognized at a point in time, certain of our product revenue is recognized on an over time basis. Predominately, over time customer contracts exist in contract manufacturing arrangements, which occur in both the CSCA and CSCI segments. Contract manufacturing revenue was \$286.8 million and \$300.5 million for the years ended December 31, 2019 and December 31, 2018, respectively.

We also recognize a portion of the store brand OTC product revenues in the CSCA segment on an over time basis; however, the timing difference between over time and point in time revenue recognition for store brand contracts is not significant due to the short time period between the customization of the product and shipment or delivery.

Contract Balances

The following table provides information about contract assets from contracts with customers (in millions):

	Balance Sheet Location	December 31, 2019	December 31, 2018	January 1, 2018
Short-term contract assets	Prepaid expenses and other current assets	\$ 26.3	\$ 25.5	\$ 20.5

NOTE 3 - ACQUISITIONS AND DIVESTITURES

Acquisitions During the Year Ended December 31, 2019

Prevacid[®]24HR

On November 29, 2019, we acquired the branded OTC rights to Prevacid[®]24HR from GlaxoSmithKline for \$61.5 million in cash. We capitalized \$61.7 million, inclusive of closing costs, as a brand named intangible asset and began amortizing it over a 20-year useful life. Operating results attributable to the product are included within our CSCA segment.

Generic Product Acquisition

On July 2, 2019, we purchased the Abbreviated New Drug Application ("ANDA") for a generic gel product for \$49.0 million in cash, which we capitalized as a developed product technology intangible asset. We launched the product during the third quarter of 2019 and began amortizing it over a 20-year useful life. Operating results attributable to the product are included within our RX segment.

Ranir Global Holdings, LLC

On July 1, 2019, we acquired 100% of the outstanding equity interest in Ranir Global Holdings, LLC ("Ranir"), a privately-held company, for total base consideration of \$750.0 million in a debt-free, cash-free transaction. After post-closing adjustments, total cash consideration paid was \$747.7 million, net of \$11.5 million cash acquired. We funded the transaction with cash on hand and borrowings under the 2018 Revolver (as defined in [Note 11](#)).

Ranir is headquartered in Grand Rapids, Michigan and is a leading global supplier of private label and branded oral self-care products. Ranir's U.S. operations are reported in our CSCA segment and its non-U.S. operations are reported in our CSCI segment. During the year ended December 31, 2019, we incurred \$15.6 million of general transaction costs (legal, banking and other professional fees). The amounts were recorded in Administration expenses and were not allocated to an operating segment.

The acquisition of Ranir was accounted for as a business combination and has been reported in our Consolidated Statements of Operations as of the acquisition date. From July 1, 2019 through December 31, 2019, Ranir generated Net sales of \$151.4 million and had \$7.6 million of Net income, which is inclusive of a non-recurring charge of \$5.7 million related to inventory costs stepped up to acquisition date fair value.

We are in the process of finalizing the allocation of goodwill and other identifiable assets to their respective tax jurisdictions. As a result, the deferred tax balance sheet amounts remain subject to adjustments once the allocation is complete. Additionally, we are finalizing the useful lives of acquired property, plant and equipment. The provisional acquisition amounts recognized for deferred taxes and the useful lives of property, plant and equipment will be finalized as soon as possible but no later than one year from the acquisition date. The final determination may result in tax bases that differ from the preliminary amount of deferred taxes and goodwill recognized, and may result in measurement period adjustments to the depreciation recorded subsequent to acquisition.

The following table summarizes the consideration paid for Ranir and the provisional amounts of the assets acquired and liabilities assumed (in millions):

	Ranir
Purchase price paid	\$ 759.2
Assets acquired:	
Cash and cash equivalents	\$ 11.5
Accounts receivable	40.6
Inventories	59.0
Prepaid expenses and other current assets	4.0
Property, plant and equipment, net	40.8
Operating lease assets	3.7
Goodwill	291.1
Definite-lived intangibles:	
Developed product technology, formulations, and product rights	\$ 48.6
Customer relationships and distribution networks	260.0
Trademarks, trade names, and brands	41.0
Indefinite-lived intangibles:	
In-process research and development	39.7
Total intangible assets	\$ 389.3
Other non-current assets	2.7
Total assets	\$ 842.7
Liabilities assumed:	
Accounts payable	\$ 17.6
Other accrued liabilities	7.7
Payroll and related taxes	5.5
Accrued customer programs	5.7
Deferred income taxes	44.2
Other non-current liabilities	2.8
Total liabilities	\$ 83.5
Net assets acquired	\$ 759.2

The goodwill of \$291.1 million arising from the acquisition consists largely of the anticipated growth from new product sales, sales to new customers, the assembled workforce, and the synergies expected from combining the operations of Perrigo and Ranir. Preliminarily, goodwill of \$223.0 million and \$68.1 million was allocated to our CSCA and CSCI segments, respectively. We are currently evaluating the tax deductibility of the provisional goodwill. We expect some portion to be deductible for income tax purposes. The definite-lived intangible assets acquired consisted of trademarks and trade names, developed product technologies, and customer relationships. Trademarks and trade names were assigned useful lives that ranged from 20 to 25-years. Developed product technologies were assigned 10-year useful lives and customer relationships were assigned 24-year useful lives. Customer relationships were valued using the multi-period excess earnings method. Trademarks and trade names, developed technology, and in-process research and development were valued using the relief from royalty method. Significant judgment was applied in estimating the fair value of the intangible assets acquired, which involved the use of significant estimates and assumptions with respect to the timing and amounts of cash flow projections, including revenue growth rates, projected profit margins, and discount rates.

During the three months ended December 31, 2019, we recorded measurement period adjustments to the valuation of identifiable intangible assets of \$46.6 million, deferred tax liabilities of \$11.6 million and miscellaneous asset adjustments of \$1.3 million. Therefore, goodwill, which was previously reported at acquisition date of \$327.4 million, was adjusted to \$291.1 million.

Pro Forma Impact of Ranir Acquisition

The following table presents unaudited pro forma information as if the Ranir acquisition had occurred on January 1, 2018 and had been combined with the results reported in our Consolidated Statements of Operations for all periods presented (in millions):

(Unaudited)	Year Ended	
	December 31, 2019	December 31, 2018
Net sales	\$ 4,975.6	\$ 5,018.9
Net income	\$ 159.3	\$ 96.8

The unaudited pro forma information is presented for information purposes only and is not indicative of the results that would have been achieved if the acquisition had taken place at such time. The unaudited pro forma information presented above includes adjustments primarily for amortization charges for acquired intangible assets, depreciation adjustments for property, plant and equipment that have been revalued, adjustments for certain acquisition-related charges, and related tax effects.

Generic Product Acquisition

On May 17, 2019, we purchased the ANDA for a generic product used to relieve pain, for \$15.7 million in cash, which we capitalized as a developed product technology intangible asset. We launched the product during the third quarter of 2019 and begin amortizing it over a 20-year useful life. Operating results attributable to the product are included within our RX segment.

Budesonide Nasal Spray and Triamcinolone Nasal Spray

On April 1, 2019, we purchased product ANDAs and other records and registrations of Budesonide Nasal Spray, a generic equivalent of Rhinocort Allergy[®], and Triamcinolone Nasal Spray, a generic equivalent of Nasacort Allergy[®], from Barr Laboratories, Inc. ("Barr"), a subsidiary of Teva Pharmaceuticals, for \$14.0 million in cash. We previously developed and marketed the products in collaboration with Barr under a development, marketing and commercialization agreement that originated in August 2003. Under this prior agreement, we paid Barr a percentage of net income from products sold by Perrigo in the U.S. By purchasing the assets from Barr and terminating the original development, marketing and commercialization agreement, we are now entitled to 100% of the income from sales of the product. Operating results attributable to these products are included within our CSCA segment. The intangible assets acquired are classified as developed product technology with a 10-year useful life.

Acquisitions During the Year Ended December 31, 2018

Generic Product Acquisition

On August 24, 2018, we purchased the ANDA for a generic topical cream for \$30.4 million in cash, which we capitalized as a developed product technology intangible asset. We launched this product during the three months ended December 31, 2018 and began amortizing the developed product technology over a 20-year useful life. Operating results attributable to the product are included within our RX segment. Subsequently, during the year ended December 31, 2019, we identified impairment indicators related to changes in pricing and competition in the market, which lowered the projected cash flows that we expect to generate from the asset. We determined the asset was impaired (refer to [Note 4](#) and [Note 7](#)).

Nasonex-branded Products

On May 29, 2018, we entered into a license agreement with Merck Sharp & Dohme Corp. ("Merck"), which allows us to develop and commercialize an OTC version of Nasonex-branded products containing the compound, mometasone furoate monohydrate. The acquisition was accounted for as an asset acquisition based on our assessment that substantially all of the fair value of the gross assets acquired was concentrated in a single identifiable asset to be used for R&D. In accordance with Accounting Standards Codification Topic 730 Research and Development ("ASC 730"), the non-refundable upfront license fee of \$50.0 million was recorded in R&D

expense in our CSCA segment because the intangible research and development asset acquired has no alternative use. The agreement requires us to make contingent payments if we obtain regulatory approval and achieve certain sales milestones. We will also be obligated to make royalty payments on potential future sales. The contingent consideration will be included in the measurement of the cost of the asset when the contingency is resolved and the consideration is paid or becomes payable. Consideration paid after U.S. Food and Drug Administration ("FDA") approval will be capitalized and amortized to cost of goods sold over the economic life of each product.

Divestitures During the Year Ended December 31, 2019

Animal Health Business

On July 8, 2019, we completed the sale of our animal health business to PetIQ for cash consideration of \$182.5 million, which resulted in a pre-tax gain of \$71.7 million recorded in our CSCA segment in Other (income) expense, net on the Consolidated Statements of Operations.

Divestitures During the Year Ended December 31, 2017

On January 3, 2017, we sold certain ANDAs to a third party for \$15.0 million, which was recorded as a gain in Other operating expense (income) on the Consolidated Statements of Operations in our RX segment.

On April 6, 2017, we completed the sale of our India Active Pharmaceuticals Ingredient ("API") business to Strides Shasun Limited. We received \$22.2 million in proceeds, inclusive of an estimated working capital adjustment, which resulted in an immaterial gain recorded in our former Other segment. Prior to closing the sale, we determined that the carrying value of the India API business exceeded its fair value less the cost to sell, resulting in an impairment charge of \$35.3 million for the year ended December 31, 2016.

On August 25, 2017, we completed the sale of our Russian business, which was previously classified as held-for-sale, to Alvogen Pharma LLC and Alvogen CEE Kft. The total sale price was €12.7 million (\$15.1 million), inclusive of an estimated working capital adjustment, resulting in an immaterial gain recorded in our CSCI segment. Prior to closing the sale, we determined that the carrying value of the Russian business exceeded its fair value less the cost to sell, resulting in an impairment charge of \$3.7 million for the year ended December 31, 2017.

On November 21, 2017, we completed the sale of our Israel API business, which was previously classified as held-for-sale, to SK Capital for a sale price of \$110.0 million, resulting in an immaterial gain recorded in our former Other segment in Other (income) expense, net on the Consolidated Statements of Operations. As a result of the sale, we recognized a guarantee liability (refer to [Note 7](#)). Per the agreement, we will be reimbursed for tax receivables for tax years prior to closing and will need to reimburse SK Capital for the settlement of any uncertain tax liability positions for tax years prior to closing. In addition, after closing and going forward, the Israel API business will be assessed by and liable to the Israel Tax Authority ("ITA") for any audit findings. We are no longer the primary obligor on the liabilities transferred to SK Capital on November 21, 2017, however, we have provided a guarantee on certain obligations. As of December 31, 2019, the remaining guarantee for these obligations is \$12.0 million.

On December 20, 2017, we completed the sale of one of the Development-Stage Rx Products to an ophthalmic pharmaceutical company. We will potentially receive the following consideration: (1) a milestone payment of \$1.5 million after the buyer achieves net sales of \$25.0 million in any given calendar year; (2) a milestone payment of \$5.0 million after the buyer achieves \$50.0 million in net sales in any given year; and (3) royalty payments of 2.5% of all net sales of the product from the date of the first commercial sales of the product and continuing until market entry of a generic equivalent of the product.

NOTE 4 - GOODWILL AND INTANGIBLE ASSETS

During the year ended December 31, 2019, we early adopted ASU No. 2017-04 which removed the Step 2 requirement in instances when the carrying value of a reporting unit exceeds its fair value. Prospectively, if a reporting unit's carrying value exceeds its fair value, we will record an impairment charge in the amount of the difference, limited to the amount of goodwill attributed to that reporting unit.

Changes in the carrying amount of goodwill, by reportable segment, were as follows (in millions):

	CSCA	CSCI ⁽¹⁾	RX ⁽²⁾	Total
Balance at December 31, 2017	\$ 1,847.4	\$ 1,205.7	\$ 1,122.3	\$ 4,175.4
Impairments	(136.7)	—	—	(136.7)
Currency translation adjustments	3.0	(54.4)	(7.5)	(58.9)
Balance at December 31, 2018	1,713.7	1,151.3	1,114.8	3,979.8
Business divestitures	(42.2)	—	—	(42.2)
Business acquisitions	223.0	68.1	—	291.1
Impairments	—	—	(109.2)	(109.2)
Currency translation adjustments	4.6	(15.7)	8.3	(2.8)
Balance at December 31, 2019	\$ 1,899.1	\$ 1,203.7	\$ 1,013.9	\$ 4,116.7

(1) We had accumulated impairments of \$868.4 million as of December 31, 2019 and December 31, 2018.

(2) We had accumulated impairments of \$109.2 million as of December 31, 2019.

RX U.S. Reporting Unit Goodwill

During the three months ended June 29, 2019, our RX U.S. reporting unit had an indication of potential impairment which was driven by a combination of industry and market factors and uncertainty related to the timing and associated cash flows of the projected albuterol sulfate inhalation aerosol (generic equivalent to ProAir[®] HFA). We prepared an impairment test as of June 29, 2019 and determined that the fair value of the RX U.S. reporting unit continued to exceed net book value by approximately 10%. The excess was lower than our annual impairment test as of September 30, 2018, in which fair value exceeded carrying value by more than 25%. While no impairment was recorded as of June 29, 2019, we continue monitoring developments such as deterioration in business performance or market multiples which could reduce the fair value of this reporting unit and lead to impairment.

In conjunction with our annual impairment test, during the three months ended December 31, 2019, we tested our RX U.S. reporting unit for impairment. As a result, we determined its carrying value exceeded estimated fair value by \$109.2 million, therefore, we recognized an impairment. The change in fair value from previous estimates was driven by industry and market factors that led to reduced projections of future cash flows (refer to [Note 7](#)). As a result of adjusting the reporting unit's carrying value to its fair value as of the annual impairment testing date, the fair value of the RX U.S. reporting unit exceeds its net book value by less than 10%.

Other Reporting Unit Goodwill

During our annual goodwill testing as of September 29, 2019, we determined the fair value of the CSC UK and Australia reporting unit was less than 20% higher than its net book value, and the Branded Consumer Self-care ("BCS") reporting unit was less than 10% higher than its net book value. Both reporting units are included in the CSCI segment. The fair value of the Oral Care International reporting unit, also in the CSCI segment, was less than 10% higher than its net book value, which is due to the recent application of fair value acquisition accounting to the reporting unit's net assets rather than the presence of impairment indicators. The fair value of the remaining reporting units, CSCA and RX UK, exceed their net book value by greater than 20%.

Animal Health Goodwill

During the three months ended September 29, 2018, the animal health reporting unit continued to experience declines in its year-to-date financial results and had additional indications of potential impairment due to changes in channel dynamics, a strategic decision to re-prioritize our brands, and a decline in the forecasted outlook of the reporting unit. Step one of the goodwill impairment test indicated that the fair value of the animal health reporting unit was below its net book value. We recorded an \$136.7 million goodwill impairment charge in the third quarter of 2018 within our CSCA segment.

Intangible assets and the related accumulated amortization consisted of the following (in millions):

	Year Ended			
	December 31, 2019		December 31, 2018	
	Gross	Accumulated Amortization	Gross	Accumulated Amortization
Indefinite-lived intangibles:				
Trademarks, trade names, and brands	\$ 18.8	\$ —	\$ 18.1	\$ —
In-process research and development	50.0	—	31.2	—
Total indefinite-lived intangibles	\$ 68.8	\$ —	\$ 49.3	\$ —
Definite-lived intangibles:				
Distribution and license agreements and supply agreements	\$ 126.7	\$ 81.1	\$ 178.6	\$ 99.0
Developed product technology, formulations, and product rights	1,392.8	755.3	1,318.8	654.6
Customer relationships and distribution networks	1,805.6	671.4	1,586.6	566.5
Trademarks, trade names, and brands	1,353.5	250.1	1,282.4	188.5
Non-compete agreements	6.5	6.0	12.9	11.8
Total definite-lived intangibles	\$ 4,685.1	\$ 1,763.9	\$ 4,379.3	\$ 1,520.4
Total intangible assets	\$ 4,753.9	\$ 1,763.9	\$ 4,428.6	\$ 1,520.4

Certain intangible assets are denominated in currencies other than U.S. dollar; therefore, their gross and net carrying values are subject to foreign currency movements.

The remaining weighted-average useful life for our amortizable intangible assets by asset class at December 31, 2019 was as follows:

Amortizable Intangible Asset Category	Remaining Weighted-Average Useful Life (Years)
Distribution and license agreements and supply agreements	7
Developed product technology, formulations, and product rights	13
Customer relationships and distribution networks	17
Trademarks, trade names, and brands	16
Non-compete agreements	1

We recorded amortization expense of \$305.5 million, \$333.6 million, and \$349.6 million during the years ended December 31, 2019, December 31, 2018, and December 31, 2017, respectively.

Our estimated future amortization expense is as follows (in millions):

Year	Amount
2020	\$ 284.4
2021	255.5
2022	226.0
2023	211.9
2024	200.9
Thereafter	1,742.5

Generic Product (equivalent to Benzaclin®)

During the year ended December 31, 2019, we identified impairment indicators on a definite-lived intangible asset related to our clindamycin and benzoyl peroxide topical gel (generic equivalent to Benzaclin®) in our RX segment. Increases in competition caused price erosion that lowered our long-range revenue forecast, which indicated the asset was no longer recoverable and was impaired. We recorded an asset impairment of \$21.2 million (refer to [Note 7](#)).

Licensed Pain Relief Products

During the year ended December 31, 2019, following commercial launch delays relating to certain pain relief products that we licensed from a third party, the licensor determined that it would not extend the license agreement upon expiration. As a result, we determined the asset was fully impaired and recorded an asset impairment of \$9.7 million relating to this license, which we had reported as a definite-lived intangible asset in our CSCI segment (refer to [Note 7](#)).

Evamist Branded Product

During the year ended December 31, 2019, we identified impairment indicators related to our Evamist branded product, which is a definite-lived intangible asset in our RX segment. The indicators related to a decline in sales volume and a corresponding reduction in our long-range revenue forecast. We recorded an asset impairment of \$10.8 million (refer to [Note 7](#)).

Generic Product

During the year ended December 31, 2019, we identified impairment indicators for a certain definite-lived asset related to changes in pricing and competition in the market, which lowered the projected cash flows we expect to generate from the asset. We recorded an asset impairment of \$27.8 million in our RX segment (refer to [Note 3](#) and [Note 7](#)).

In-process R&D ("IPR&D")

We recorded an impairment charge of \$5.8 million, \$8.7 million, and \$12.7 million on certain IPR&D assets during the years ended December 31, 2019, December 31, 2018, and December 31, 2017, respectively, due to changes in the projected development and regulatory timelines for various projects.

Animal Health Intangible Assets

During the three months ended September 29, 2018, we performed a recoverability test of the definite-lived intangibles and determined a significant asset group was not recoverable and determined the fair value of the indefinite-lived intangible asset had fallen below its net book value. We recorded an impairment charge in the third quarter of 2018 in our CSCA segment comprised of a brand indefinite-lived intangible asset impairment charge of \$27.7 million, a developed product technology and distribution agreement definite-lived intangible asset impairment of \$41.6 million, a supply agreement definite-lived intangible asset impairment of \$2.8 million, and a trade name and trademark definite-lived intangible asset impairment of \$4.5 million (refer to [Note 7](#)).

As a result of the strategic decision to re-prioritize a brand within the indefinite-lived asset, we reassessed the useful life of the indefinite-lived intangible asset and reclassified a \$5.4 million indefinite-lived intangible asset to a definite-lived asset within the CSCA segment as of September 29, 2018. Subsequently, during the three months ended September 28, 2019, we completed the sale of our animal health business to PetIQ (refer to [Note 3](#)).

Lumara

During the year ended December 31, 2017, we identified impairment indicators for our Lumara Health, Inc. ("Lumara") definite-lived intangible assets which related to the decline in our 2017 performance expectations and a reduction in our long-range revenue growth forecast. We determined the Lumara product assets were impaired by \$18.5 million within our RX segment (refer to [Note 7](#)).

NOTE 5 - ACCOUNTS RECEIVABLE FACTORING

We have accounts receivable factoring arrangements with non-related third-party financial institutions (the “Factors”). Pursuant to the terms of the arrangements, we sell to the Factors certain of our accounts receivable balances on a non-recourse basis for credit approved accounts. An administrative fee per invoice is charged on the gross amount of accounts receivables assigned to the Factors, and interest is calculated at the applicable EUR LIBOR rate plus a spread. The total amount factored on a non-recourse basis and excluded from accounts receivable was \$10.0 million and \$24.3 million at December 31, 2019 and December 31, 2018, respectively.

NOTE 6 - INVENTORIES

Major components of inventory were as follows (in millions):

	Year Ended	
	December 31, 2019	December 31, 2018
Finished goods	\$ 530.3	\$ 444.9
Work in process	186.9	197.5
Raw materials	250.1	235.6
Total inventories	<u>\$ 967.3</u>	<u>\$ 878.0</u>

NOTE 7 - FAIR VALUE MEASUREMENTS

Fair value is the price that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following fair value hierarchy is used in selecting inputs, with the highest priority given to Level 1, as these are the most transparent or reliable.

- Level 1: Quoted prices for identical instruments in active markets.
- Level 2: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable in active markets.
- Level 3: Valuations derived from valuation techniques in which one or more significant inputs are not observable.

The table below summarizes the valuation of our financial instruments carried at fair value by the above pricing categories (in millions):

	Year Ended					
	December 31, 2019			December 31, 2018		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Measured at fair value on a recurring basis:						
Assets:						
Investment securities	\$ 6.6	\$ —	\$ —	\$ 9.4	\$ —	\$ —
Foreign currency forward contracts	—	4.3	—	—	3.8	—
Cross-currency swap	—	26.3	—	—	—	—
Funds associated with Israeli severance liability	—	14.6	—	—	13.0	—
Royalty Pharma contingent milestone	—	—	95.3	—	—	323.2
Total assets	\$ 6.6	\$ 45.2	\$ 95.3	\$ 9.4	\$ 16.8	\$ 323.2
Liabilities:						
Foreign currency forward contracts	\$ —	\$ 8.4	\$ —	\$ —	\$ 9.2	\$ —
Contingent consideration payments	—	—	11.9	—	—	15.3
Total liabilities	\$ —	\$ 8.4	\$ 11.9	\$ —	\$ 9.2	\$ 15.3

Measured at fair value on a non-recurring basis:

Assets:						
Goodwill ⁽¹⁾	\$ —	\$ —	\$ 1,013.1	\$ —	\$ —	\$ 42.2
Indefinite-lived intangible assets ⁽²⁾	—	—	—	—	—	10.5
Definite-lived intangible assets ⁽³⁾	—	—	23.3	—	—	22.4
Total assets	\$ —	\$ —	\$ 1,036.4	\$ —	\$ —	\$ 75.1

- (1) During the year ended December 31, 2019, goodwill with a carrying amount of \$1,122.3 million was written down to a fair value of \$1,013.1 million. As of December 31, 2018, goodwill with a carrying amount of \$178.9 million was written down to a fair value of \$42.2 million.
- (2) During the year ended December 31, 2018, indefinite-lived intangible assets with a carrying amount of \$46.9 million were written down to a fair value of \$10.5 million.
- (3) During the year ended December 31, 2019, definite-lived intangible assets with a carrying amount of \$55.3 million were written down to a fair value of \$23.3 million. As of December 31, 2018, definite-lived intangible assets with a carrying amount of \$72.0 million were written down to a fair value of \$22.4 million.

There were no transfers among Level 1, 2, and 3 during the years ended December 31, 2019 or December 31, 2018. Our policy regarding the recording of transfers between levels is to record any such transfers at the end of the reporting period (refer to [Note 8](#) for information on our investment securities and [Note 9](#) for a discussion of derivatives).

Foreign Currency Forward Contracts

We value the foreign currency forward contracts based on notional amounts, contractual rates, and observable market inputs, such as currency exchange rates and credit risk.

Cross-currency Swaps

We value the cross-currency swaps using a method which discounts the expected cash flows resulting from the derivative. We estimate the cash flows using the contractual term of the derivative, including the period to maturity and we use observable market-based inputs, including interest rate curves, and foreign exchange rates.

Funds Associated with Israel Severance Liability

Israeli labor laws and agreements require us to pay benefits to employees dismissed or retiring under certain circumstances. Severance pay is calculated on the basis of the most recent employee salary levels and the length of employee service. We make regular deposits to retirement funds and purchase insurance policies to partially fund these liabilities. The funds are determined using prices for recently traded financial instruments 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.

Financial Assets

We divested the Tysabri[®] financial asset to Royalty Pharma for up to \$2.85 billion, consisting of \$2.2 billion in cash and up to \$250.0 million and \$400.0 million in milestone payments if the royalties on global net sales of Tysabri[®] that are received by Royalty Pharma meet specific thresholds in 2018 and 2020, respectively. As a result of this transaction, we transferred the entire financial asset to Royalty Pharma and recorded a \$17.1 million gain on Change in financial assets in the Consolidated Statement of Operations.

Royalty Pharma Contingent Milestone

The table below summarizes the change in fair value of the Royalty Pharma contingent milestone (in millions):

	Year Ended	
	December 31, 2019	December 31, 2018
Beginning balance	\$ 323.2	\$ 134.5
Payments received	(250.0)	—
Change in fair value	22.1	188.7
Ending balance	\$ 95.3	\$ 323.2

We value our contingent milestone payments from Royalty Pharma using a modified Black-Scholes Option Pricing Model ("BSOPM"). Key inputs in the BSOPM are the estimated volatility and rate of return of royalties on global net sales of Tysabri[®] that are received by Royalty Pharma until the contingent milestones are resolved. Volatility and the estimated fair value of the milestones have a positive relationship such that higher volatility translates to a higher estimated fair value of the contingent milestone payments. We assess volatility and rate of return inputs quarterly by analyzing certain market volatility benchmarks and the risk associated with Royalty Pharma achieving the underlying projected royalties. The table below represents the volatility and rate of return:

	Year Ended	
	December 31, 2019	December 31, 2018
Volatility	30.0%	30.0%
Rate of return	7.92%	8.05%

During the year ended December 31, 2019 the fair value of the Royalty Pharma milestone payment related to 2020 increased by \$22.1 million. These adjustments were driven by higher projected global net sales of Tysabri[®] and the estimated probability of achieving the earn-out.

During the year ended December 31, 2018, royalties on global net sales of Tysabri[®] received by Royalty Pharma met the 2018 threshold resulting in an increase to the asset and a gain of \$170.1 million recognized in Change in financial assets on the Consolidated Statement of Operations. Also during that period, the fair value of the remaining Royalty Pharma contingent milestone payment related to 2020 increased \$18.6 million due to higher projected global net sales of Tysabri[®] and the estimated probability of achieving the contingent milestone payment related to 2020.

In order for us to receive the milestone payment related to 2020 of \$400.0 million, Royalty Pharma payments from Biogen for Tysabri[®] sales in 2020 must exceed \$351.0 million. The Royalty Pharma payments from Biogen for Tysabri[®] were \$337.5 million in 2018. If Royalty Pharma payments from Biogen for Tysabri[®] sales do not meet the prescribed threshold in 2020, we will write-off the \$95.3 million asset and record a loss. If the prescribed threshold is exceeded, we will increase the asset to \$400.0 million and recognize income of \$304.7 million in Change in financial assets on the Consolidated Statements of Operations.

Guarantee Liability Related to The Israel API Sale

During the year ended December 31, 2017, we completed the sale of our Israel API business to SK Capital (refer to [Note 3](#)), resulting in a guarantee liability of \$13.8 million, classified as a Level 3 liability within the fair value hierarchy. Per the agreement, we will be reimbursed for tax receivables for tax years prior to closing and will need to reimburse SK Capital for the settlement of any uncertain tax liability positions for tax years prior to closing. In addition, after closing and going forward, the Israel API business will be assessed by and liable to the Israel Tax Authority ("ITA") for any audit findings. We are no longer the primary obligor on the liabilities transferred to SK Capital, but we have provided a guarantee on certain obligations. During the year ended December 31, 2019, we reduced the liability in the amount of \$1.8 million. At December 31, 2019, the remaining guarantee liability was \$12.0 million.

Contingent Consideration Payments

The table below summarizes the change in fair value of contingent consideration payments (in millions):

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Beginning balance	\$ 15.3	\$ 22.0	\$ 69.9
Changes in value	(1.4)	(1.5)	(19.5)
Divestiture	—	—	(12.5)
Currency translation adjustments	—	(0.2)	1.5
Settlements and other adjustments	(2.0)	(5.0)	(17.4)
Ending balance	<u>\$ 11.9</u>	<u>\$ 15.3</u>	<u>\$ 22.0</u>

Contingent consideration represents milestone payment obligations obtained through product acquisitions, which are valued using estimates based on probability-weighted outcomes, sensitivity analysis, and discount rates reflective of the risk involved. The estimates are updated quarterly and the liabilities are adjusted to fair value depending on a number of assumptions, including the competitive landscape and regulatory approvals that may impact the future sales of a product. During the year ended December 31, 2017, we reduced a contingent consideration liability associated with certain IPR&D assets and recorded a corresponding gain of \$17.4 million. The liability decrease relates to a reduction of the probability of achievement assumptions and anticipated cash flows. In addition, we sold a certain IPR&D asset and the corresponding contingent consideration of \$12.5 million was reduced.

Non-recurring Fair Value Measurements

The non-recurring fair values represent only those assets whose carrying values were adjusted to fair value during the reporting period.

Goodwill and Intangible Assets

RX U.S. Reporting Unit Goodwill

When determining the fair value of our RX U.S. reporting unit for the year ended December 31, 2019, we utilized a combination of comparable company and discounted cash flow techniques. In our comparable company market approach, we considered observable market information and transactions for companies that we deemed to be of a comparable nature, scope, and size of our RX U.S. reporting unit (Level 2 inputs). Our cash flow projections included revenue assumptions related to new and existing products, plus gross margin and operating expenses based on the reporting unit's growth plans (Level 3 inputs). In our discounted cash flow analysis, we used a long-term growth rate of 0.0%, which assumes new product launches will, over time, offset decreases in cash flows of existing portfolio products with definite lives. We used a discount rate of 10.2% in this analysis. The discount rate correlates with the required investment return and risk that we believe market participants would apply to the projected growth rate. In addition, we burdened projected free cash flows with the capital spending deemed necessary to support the cash flows and applied blended jurisdictional tax rates ranging from 19.1% to 21.7%. We

weighted indications of fair value resulting from the market approach and present value techniques, considering the reasonableness of the range of measurements and the point within the range that we determined was most representative of fair market conditions (refer to [Note 4](#)).

Generic product (equivalent to Benzaclin®)

During the year ended December 31, 2019, we measured the impairment of our clindamycin and benzoyl peroxide topical gel (generic equivalent to Benzaclin®), a definite-lived intangible asset. We utilized a discounted cash flow technique to estimate the fair value of the asset. Significant valuation inputs and assumptions relate to our projected future cash flows, including the total market size, our estimated market share, and our average selling price (refer to [Note 4](#)).

Licensed Pain Relief Products

During the year ended December 31, 2019, we measured the impairment of certain pain relief products that we license from a third party, a definite-lived intangible asset. We determined the asset was fully impaired because the agreement with the licensor would not be extended upon expiration (refer to [Note 4](#)).

Evamist branded product

When measuring the impairment of our Evamist branded product, a definite-lived intangible asset, during the year ended December 31, 2019, we utilized a discounted cash flow technique to estimate the fair value of the asset. Significant valuation inputs and assumptions relate to our projected future cash flows, including volume and average selling price (refer to [Note 4](#)).

Generic product

When measuring the impairment of a certain definite-lived asset during the year ended December 31, 2019, we utilized a discounted cash flow technique to estimate the fair value of the asset. Significant valuation inputs and assumptions relate to our projected future cash flows, including the total market size, our estimated market share, and our average selling price (refer to [Note 3](#) and [Note 4](#)).

Animal Health

When determining the fair value of our animal health reporting unit for the year ended December 31, 2018, we utilized a combination of comparable company market and discounted cash flow techniques. In our comparable company market approach, we considered observable market information and transactions for companies that we deemed to be of a comparable nature, scope, and size of animal health (Level 2 inputs). Our cash flow projections included revenue assumptions related to new products, product line extensions, and existing products, plus gross margin, advertising and promotion, and other operating expenses based on the growth plans (Level 3 inputs). In our discounted cash flow analysis, we utilized projected sales growth rate and discount rate assumptions of 2.5% and 9.8%, respectively. The discount rate correlates with the required investment return and risk that we believe market participants would apply to the projected growth. In addition, we burdened projected free cash flows with the capital spending deemed necessary to support the cash flows and applied the jurisdictional tax rate of 22.8%. We weighted indications of fair value resulting from the market approach and present value techniques, considering the reasonableness of the range of measurements and the point within the range that we determined was most representative of fair market conditions (refer to [Note 4](#)).

When assessing our animal health indefinite-lived intangible asset for the year ended December 31, 2018, we utilized a multi-period excess earnings method ("MPEEM") to determine the fair value of the intangible asset. Our cash flow projections included revenue assumptions related to new products, product line extensions, and existing products. We utilized long-term growth rate and discount rate assumptions of (0.3)% and 9.8%, respectively, and we applied a jurisdictional tax rate of 22.8% (refer to [Note 4](#)).

When assessing our animal health definite-lived assets for impairment for the year ended December 31, 2018, we utilized a combination of MPEEM and relief from royalty methods to determine the fair values of definite-lived assets within the asset group. The projected financial information, inputs, and assumptions utilized were consistent with those utilized in the goodwill discounted cash flow analysis described above (refer to [Note 4](#)).

Lumara

When assessing the Lumara definite-lived assets for impairment for the year ended December 31, 2017, we utilized a MPEEM to determine the fair value of Lumara product assets. Our inputs and assumptions included a 5-year average growth rate of (4.1)% and discount rate of 13.5%.

Fixed Rate Long-term Debt

Our fixed rate long-term debt consisted of the following (in millions):

	Year Ended			
	December 31, 2019		December 31, 2018	
	Level 1	Level 2	Level 1	Level 2
Public bonds				
Carrying value (excluding discount)	\$ 2,600.0		\$ 2,600.0	
Fair value	\$ 2,618.4		\$ 2,316.6	
Retail bond and private placement note				
Carrying value (excluding premium)		\$ 151.4		\$ 292.5
Fair value		\$ 168.4		\$ 307.9

The fair values of our public bonds for all periods were based on quoted market prices. The fair values of our retail bond and private placement note for all periods were based on interest rates offered for borrowings of a similar nature and remaining maturities. The fair value of our retail bond for the year ended December 31, 2018 was based on interest rates offered for borrowings of a similar nature and remaining maturities. On May 23, 2019, we repaid the retail bond in full (refer to [Note 11](#)).

The carrying amounts of our other financial instruments, consisting of cash and cash equivalents, accounts receivable, accounts payable, short-term debt, revolving credit agreements, and variable rate long-term debt, approximate their fair value.

NOTE 8 - INVESTMENTS

The following table summarizes the measurement category, balance sheet location, and balances of our equity securities (in millions):

Measurement Category	Balance Sheet Location	Year Ended	
		December 31, 2019	December 31, 2018
Fair value method	Prepaid expenses and other current assets	\$ 6.6	\$ 9.4
Fair value method ⁽¹⁾	Other non-current assets	\$ 2.3	\$ 4.4
Equity method	Other non-current assets	\$ 17.8	\$ 15.1

(1) Measured at fair value using the Net Asset Value practical expedient.

The following table summarizes the expense (income) recognized in earnings of our equity securities (in millions):

Measurement Category	Income Statement Location	Year Ended		
		December 31, 2019	December 31, 2018	December 31, 2017
Fair value method	Other (income) expense, net	\$ 4.9	\$ 9.5	\$ —
Equity method	Other (income) expense, net	\$ (2.7)	\$ (2.7)	\$ (0.3)

On January 1, 2018, as a result of the adoption of ASU 2016-01 Financial Instruments - Recognition and Measurement of Financial Assets and Liabilities ("ASU 2016-01"), we made a \$1.0 million cumulative-effect adjustment to Retained earnings (accumulated deficit) net of tax that consisted of net unrealized losses on previously classified as available for sale securities from OCI.

During the year ended December 31, 2018, we increased our equity method investment in Zibo Xinhua - Perrigo Pharmaceutical Company Limited by \$7.5 million.

NOTE 9 - DERIVATIVE INSTRUMENTS AND HEDGING ACTIVITIES

Cross Currency Swaps

We entered into a cross-currency swap designated as a net investment hedge on August 15, 2019, to hedge the Euro currency exposure of our net investment in European operations. This agreement is a contract to exchange floating-rate Euro payments for floating-rate U.S. dollar payments. The payments are based on a notional basis of €450.0 million (\$498.0 million) and settle quarterly.

Interest Rate Swaps and Treasury Locks

During the year ended December 31, 2017, we repaid \$584.4 million of senior notes with an interest rate of 4.000% due 2023 and \$309.5 million of senior notes with an interest rate of 5.300% due 2043 (refer to [Note 11](#)). As a result of the senior note repayments on June 15, 2017, the proportionate amount remaining in OCI related to the pre-issuance hedge was reclassified to earnings. Accordingly, we recorded a loss of \$5.9 million in Other expense, net for the amount remaining in OCI.

Foreign Currency Forwards

Foreign currency forward contracts entered into to hedge forecasted revenue and expenses were as follows (in millions):

	Notional Amount	
	December 31, 2019	December 31, 2018
Israeli Shekel (ILS)	\$ 712.7	\$ 232.6
European Euro (EUR)	157.6	134.2
United States Dollar (USD)	92.4	39.3
British Pound (GBP)	86.9	90.2
Danish Krone (DKK)	51.7	56.5
Swedish Krona (SEK)	42.0	38.7
Canadian Dollar (CAD)	41.3	31.7
Polish Zloty (PLZ)	21.5	18.2
Chinese Yuan (CNY)	20.9	—
Mexican Peso (MPX)	9.7	25.9
Norwegian Krone (NOK)	6.6	6.2
Switzerland Franc (CHF)	4.1	2.6
Romanian New Leu (RON)	2.3	4.4
Other	7.5	6.1
Total	\$ 1,257.2	\$ 686.6

Effects of Derivatives on the Financial Statements

The below tables indicate the effects of all derivative instruments on the Consolidated Financial Statements. All amounts exclude income tax effects.

The balance sheet location and gross fair value of our outstanding derivative instruments were as follows (in millions):

	Balance Sheet Location	Asset Derivatives	
		Fair Value	
		Year Ended	
		December 31, 2019	December 31, 2018
Designated derivatives			
Foreign currency forward contracts	Prepaid expenses and other current assets	\$ 1.0	\$ 2.0
Cross-currency swap	Prepaid expenses and other current assets	26.3	—
Total designated derivatives		<u>\$ 27.3</u>	<u>\$ 2.0</u>
Non-designated derivatives			
Foreign currency forward contracts	Prepaid expenses and other current assets	\$ 3.3	\$ 1.8

		Liability Derivatives	
		Fair Value	
		Year Ended	
Balance Sheet Location		December 31, 2019	December 31, 2018
Designated derivatives			
Foreign currency forward contracts	Other accrued liabilities	\$ 4.7	\$ 6.4
Non-designated derivatives			
Foreign currency forward contracts	Other accrued liabilities	\$ 3.7	\$ 2.8

The following tables summarize the effect of derivative instruments designated as hedging instruments in AOCI (in millions):

Instrument	Year Ended				
	December 31, 2019				
	Amount of Gain/(Loss) Recorded in OCI ⁽¹⁾	Classification of Gain/(Loss) Reclassified from AOCI into Earnings	Amount of Gain/(Loss) Reclassified from AOCI into Earnings	Classification of Gain/(Loss) Recognized into Earnings Related to Amounts Excluded from Effectiveness Testing	Amount of Gain/(Loss) Recognized in Earnings on Derivatives Related to Amounts Excluded from Effectiveness Testing
Cash flow hedges					
Treasury locks	\$ —	Interest expense, net	\$ (0.1)	Interest expense, net	\$ —
Interest rate swap agreements	—	Interest expense, net	(1.8)	Interest expense, net	—
Foreign currency forward contracts	(1.2)	Net sales	2.5	Net sales	(2.1)
		Cost of sales	0.1	Cost of sales	(1.5)
	<u>\$ (1.2)</u>		<u>\$ 0.7</u>		<u>\$ (3.6)</u>
Net investment hedges					
Cross-currency swap	\$ 31.2			Interest expense, net	\$ 4.9

(1) Net loss of \$2.8 million is expected to be reclassified out of AOCI into earnings during the next 12 months.

Instrument	Year Ended		
	December 31, 2018		
	Effective Portion		
	Amount of Gain/(Loss) Recorded in OCI	Classification of Gain/(Loss) Reclassified from AOCI into Earnings	Amount of Gain/(Loss) Reclassified from AOCI into Earnings
Treasury locks	\$ —	Interest expense, net	\$ (0.1)
Interest rate swap agreements	—	Interest expense, net	(1.8)
Foreign currency forward contracts	(9.1)	Net sales	0.5
		Cost of sales	1.9
		Interest expense, net	(4.8)
		Other (income) expense, net	2.1
	<u>\$ (9.1)</u>		<u>\$ (2.2)</u>

Instrument	Year Ended		
	December 31, 2017		
	Effective Portion		
	Amount of Gain/ (Loss) Recorded in OCI	Classification of Gain/ (Loss) Reclassified from AOCI into Earnings	Amount of Gain/ (Loss) Reclassified from AOCI into Earnings
Treasury locks	\$ —	Interest expense, net	\$ (0.1)
Interest rate swap agreements	—	Interest expense, net	(2.1)
		Other (income) expense, net	(6.0)
Foreign currency forward contracts	9.4	Net sales	1.5
		Cost of sales	5.6
		Interest expense, net	(2.6)
		Other (income) expense, net	(1.5)
	<u>\$ 9.4</u>		<u>\$ (5.2)</u>

The gain (loss) recognized against earnings for the ineffective portion of our designated cash flow hedges were as follows (in millions):

Designated Cash Flow Hedges	Income Statement Location	Amount of Gain/ (Loss) Recognized in Earnings (Ineffective Portion)
		Year Ended December 31, 2017
Foreign currency forward contracts	Net sales	\$ 0.2
	Cost of sales	0.1
	Other expense, net	1.0
		<u>\$ 1.3</u>

The amounts of gain/(loss) recognized in earnings related to our non-designated derivatives on the Consolidated Statements of Operations were as follows (in millions):

Non-Designated Derivatives	Income Statement Location	Year Ended		
		December 31, 2019	December 31, 2018	December 31, 2017
Foreign currency forward contracts	Other (income) expense, net	\$ (25.4)	\$ 7.6	\$ 12.6
	Interest expense, net	1.8	(1.0)	(5.3)
		<u>\$ (23.6)</u>	<u>\$ 6.6</u>	<u>\$ 7.3</u>

The classification and amount of gain/(loss) recognized in earnings on fair value and hedging relationships are as follows (in millions):

	Year Ended			
	December 31, 2019			
	Net Sales	Cost of Sales	Interest Expense, net	Other (Income) Expense, net
Total amounts of income and expense line items presented on the Consolidated Statements of Operations in which the effects of fair value or cash flow hedges are recorded	\$ 4,837.4	\$ 3,064.1	\$ 121.7	\$ (66.0)
The effects of cash flow hedging:				
Gain (loss) on cash flow hedging relationships				
Foreign currency forward contracts				
Amount of gain or (loss) reclassified from AOCI into earnings	\$ 2.5	\$ 0.1	\$ —	\$ —
Amount excluded from effectiveness testing recognized using a systematic and rational amortization approach	\$ (2.1)	\$ (1.5)	\$ —	\$ —
Treasury locks				
Amount of gain or (loss) reclassified from AOCI into earnings	\$ —	\$ —	\$ (0.1)	\$ —
Interest rate swap agreements				
Amount of gain or (loss) reclassified from AOCI into earnings	\$ —	\$ —	\$ (1.8)	\$ —

NOTE 10 - LEASES

The balance sheet locations of our lease assets and liabilities were as follows (in millions):

Assets	Balance Sheet Location	December 31, 2019
Operating	Operating lease assets	\$ 129.9
Finance	Other non-current assets	27.6
Total		<u>\$ 157.5</u>
Liabilities	Balance Sheet Location	December 31, 2019
Current		
Operating	Other accrued liabilities	\$ 32.0
Finance	Current indebtedness	3.4
Non-Current		
Operating	Other non-current liabilities	101.7
Finance	Long-term debt, less current portion	21.1
Total		<u>\$ 158.2</u>

The below table shows our lease assets and liabilities by reporting segment (in millions):

	Assets		Liabilities	
	Operating	Financing	Operating	Financing
	December 31, 2019	December 31, 2019	December 31, 2019	December 31, 2019
CSCA	\$ 22.4	\$ 16.8	\$ 22.8	\$ 16.6
CSCI	41.6	5.8	42.4	2.9
RX	35.1	0.8	36.3	0.8
Unallocated	30.8	4.2	32.2	4.2
Total	\$ 129.9	\$ 27.6	\$ 133.7	\$ 24.5

Lease expense was as follows (in millions):

	Year Ended
	December 31, 2019
Operating leases ⁽¹⁾	\$ 43.7
Finance leases	
Amortization	\$ 3.2
Interest	0.6
Total finance leases	\$ 3.8

(1) Includes short-term leases and variable lease costs, which are immaterial.

Total operating lease expense for the years ended December 31, 2018 and December 31, 2017 were \$51.2 million and \$50.9 million, respectively.

The annual future maturities of our leases as of December 31, 2019 are as follows (in millions):

	Operating Leases	Finance Leases	Total
2020	\$ 37.2	\$ 4.1	\$ 41.3
2021	27.4	5.4	32.8
2022	20.2	2.7	22.9
2023	15.0	1.7	16.7
2024	11.9	1.3	13.2
After 2024	41.5	14.2	55.7
Total lease payments	153.2	29.4	182.6
Less: Interest	19.5	4.9	24.4
Present value of lease liabilities	\$ 133.7	\$ 24.5	\$ 158.2

Our weighted average lease terms and discount rates are as follows:

	December 31, 2019
Weighted-average remaining lease term (in years)	
Operating leases	6.56
Finance leases	10.33
Weighted-average discount rate	
Operating leases	4.11%
Finance leases	3.47%

Our lease cash flow classifications are as follows (in millions):

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities	
Operating cash flows for operating leases	\$ 43.9
Operating cash flows for finance leases	\$ 0.6
Financing cash flows for finance leases	\$ 3.0
Leased assets obtained in exchange for new finance lease liabilities	\$ 20.2
Leased assets obtained in exchange for new operating lease liabilities	\$ 10.3

NOTE 11 - INDEBTEDNESS

Total borrowings outstanding are summarized as follows (in millions):

	Year Ended	
	December 31, 2019	December 31, 2018
Term loan		
* 2018 Term loan due March 8, 2020	\$ —	\$ 351.3
2019 Term loan due August 15, 2022	600.0	—
Total term loans	600.0	351.3
Notes and bonds		
<u>Coupon</u>	<u>Due</u>	
* 5.000%	May 23, 2019 ⁽³⁾	—
3.500%	March 15, 2021 ⁽⁴⁾	280.4
3.500%	December 15, 2021 ⁽¹⁾	309.6
* 5.105%	July 28, 2023 ⁽³⁾	151.4
4.000%	November 15, 2023 ⁽²⁾	215.6
3.900%	December 15, 2024 ⁽¹⁾	700.0
4.375%	March 15, 2026 ⁽⁴⁾	700.0
5.300%	November 15, 2043 ⁽²⁾	90.5
4.900%	December 15, 2044 ⁽¹⁾	303.9
Total notes and bonds		2,751.4
Other financing		24.6
Unamortized premium (discount), net		7.3
Deferred financing fees		(14.1)
Total borrowings outstanding		3,369.2
Current indebtedness		(3.4)
Total long-term debt less current portion	\$	\$ 3,365.8
		\$ 3,052.2

(1) Discussed below collectively as the "2014 Notes"

(2) Discussed below collectively as the "2013 Notes"

(3) Debt assumed from Omega

(4) Discussed below collectively as the "2016 Notes"

* Debt denominated in euros subject to fluctuations in the euro-to-U.S. dollar exchange rate.

We are in compliance with all covenants under our debt agreements as of December 31, 2019.

Revolving Credit Agreements

On March 8, 2018, we terminated the revolving credit agreement entered into on December 5, 2014 and entered into a \$1.0 billion revolving credit agreement maturing on March 8, 2023 (the "2018 Revolver"). There were no borrowings outstanding under the 2018 Revolver as of December 31, 2019 or December 31, 2018.

Term Loans

On December 5, 2014, Perrigo Finance entered into a term loan agreement consisting of a €500.0 million (\$614.3 million) tranche, maturing on December 5, 2019. On March 8, 2018, we repaid the €350.0 million outstanding under our term loan with the proceeds of a new €350.0 million (\$431.0 million) term loan, maturing March 8, 2020 (the "2018 Term Loan"). In addition, as a result of the refinancing during the three months ended March 31, 2018, we recorded a loss of \$0.5 million, consisting of the write-off of deferred financing fees in Loss on extinguishment of debt on the Consolidated Statements of Operations. During the year ended December 31, 2019, we made \$24.7 million in scheduled principal payments.

On August 15, 2019, we refinanced the €284.4 million (\$317.1 million) outstanding under the 2018 Term Loan with the proceeds of a new \$600.0 million term loan, maturing on August 15, 2022 (the "2019 Term Loan"). As a result of the refinancing, during the year ended December 31, 2019, we recorded a loss of \$0.2 million, consisting of the write-off of deferred financing fees in Loss on extinguishment of debt on the Consolidated Statements of Operations.

Notes and Bonds

2016 Notes

On March 7, 2016, Perrigo Finance issued \$500.0 million in aggregate principal amount of 3.500% senior notes due 2021 and \$700.0 million in aggregate principal amount of 4.375% senior notes due 2026 (together, the "2016 Notes") and received net proceeds of \$1.2 billion after fees and market discount. Interest on the 2016 Notes is payable semiannually in arrears in March and September of each year, beginning in September 2016. The 2016 Notes are governed by a base indenture and a second supplemental indenture (collectively, the "2016 Indenture"). The 2016 Notes are fully and unconditionally guaranteed on a senior basis by Perrigo, and no other subsidiary of Perrigo guarantees the 2016 Notes. The proceeds were used to repay our revolving credit agreement entered into in December 2014 and amounts borrowed under a \$750.0 million revolving credit agreement Perrigo Finance had entered into in December 2015. There are no restrictions under the 2016 Notes on our ability to obtain funds from our subsidiaries. Perrigo Finance may redeem the 2016 Notes in whole or in part at any time for cash at the make-whole redemption prices described in the 2016 Indenture.

Notes and Bonds Assumed from Omega

In connection with the Omega acquisition, on March 30, 2015, the remaining assumed debt is as follows:

- €135.0 million (\$147.0 million) in aggregate principal amount of 5.105% senior notes due 2023 (the "2023 Notes"); and
- €120.0 million (\$130.7 million) in aggregate principal amount of 5.000% retail bonds due 2019 which was repaid on May 23, 2019 in full (collectively, the "Retail Bonds").

The fair value of the 2023 Notes and Retail Bonds exceeded par value by €93.6 million (\$101.9 million) on the date of the Omega acquisition. As a result, a fair value adjustment was recorded as part of the carrying value of the underlying debt and will be amortized as a reduction of interest expense over the remaining terms of the respective debt instruments. The adjustment does not affect cash interest payments.

2014 Notes

On December 2, 2014, Perrigo Finance issued \$500.0 million in aggregate principal amount of 3.500% senior notes due 2021 (the "2021 Notes"), \$700.0 million in aggregate principal amount of 3.900% senior notes due 2024 (the "2024 Notes"), and \$400.0 million in aggregate principal amount of 4.900% senior notes due 2044 (the "2044 Notes" and, together with the 2021 Notes and the 2024 Notes, the "2014 Notes") and received net proceeds of \$1.6 billion after fees and market discount. Interest on the 2014 Notes is payable semiannually in arrears in June and December of each year, beginning in June 2015. The 2014 Notes are governed by a base indenture and a first supplemental indenture (collectively, the "2014 Indenture"). The 2014 Notes are fully and unconditionally guaranteed on a senior unsecured basis by Perrigo, and no other subsidiary of Perrigo guarantees the 2014 Notes.

There are no restrictions under the 2014 Notes on our ability to obtain funds from our subsidiaries. Perrigo Finance may redeem the 2014 Notes in whole or in part at any time for cash at the make-whole redemption prices described in the 2014 Indenture.

2013 Notes

On November 8, 2013, Perrigo Company issued \$500.0 million aggregate principal amount of its 1.300% senior notes due 2016 (the "1.300% 2016 Notes"), \$600.0 million aggregate principal amount of its 2.300% senior notes due 2018 (the "2018 Notes"), \$800.0 million aggregate principal amount of its 4.000% senior notes due 2023 (the "4.000% 2023 Notes") and \$400.0 million aggregate principal amount of its 5.300% senior notes due 2043 (the "2043 Notes" and, together with the 1.300% 2016 Notes, the 2018 Notes and the 4.000% 2023 Notes, the "2013 Notes") in a private placement with registration rights. We received net proceeds of \$2.3 billion from the issuance of the 2013 Notes after fees and market discount. On September 29, 2016, we repaid all \$500.0 million of the 1.300% 2016 Notes outstanding.

Interest on the 2013 Notes is payable semiannually in arrears in May and November of each year, beginning in May 2014. The 2013 Notes are governed by a base indenture and a first supplemental indenture (collectively, the "2013 Indenture"). The 2013 Notes are our unsecured and unsubordinated obligations, ranking equally in right of payment to all of our existing and future unsecured and unsubordinated indebtedness. The 2013 Notes are not entitled to mandatory redemption or sinking fund payments. We may redeem the 2013 Notes in whole or in part at any time for cash at the make-whole redemption prices described in the 2013 Indenture. The 2013 Notes were guaranteed on an unsubordinated, unsecured basis by the same entities that guaranteed our then-outstanding credit agreement until November 21, 2014, at which time the 2013 Indenture was amended to remove all guarantors.

On September 2, 2014, we offered to exchange our private placement senior notes for public bonds (the "Exchange Offer"). The Exchange Offer expired on October 1, 2014, at which time substantially all of the private placement notes had been exchanged for bonds registered with the Securities and Exchange Commission. As a result of the changes in the guarantor structure noted above, we are no longer required to present guarantor financial statements.

Other Financing

Overdraft Facilities

We have overdraft facilities available that we use to support our cash management operations. We report any balances outstanding in the above table under "Other financing". There were no borrowings outstanding under the facilities as of December 31, 2019 or December 31, 2018.

We have financing leases that are reported in the above table under "Other financing" (refer to [Note 10](#)).

Debt Repayments and Related Extinguishment During the Year Ended December 31, 2017

During the year ended December 31, 2017, we reduced our outstanding debt by \$2.6 billion through a variety of early redemption and tender offer transactions, resulting in a loss of \$135.2 million recorded in Loss on extinguishment of debt on the Consolidated Statement of Operations.

Future Maturities

The annual future maturities of our short-term and long-term debt, including capitalized leases, are as follows (in millions):

Payment Due	Amount
2020	\$ 3.4
2021	594.2
2022	604.2
2023	371.2
2024	704.2
Thereafter	1,098.8

NOTE 12 - EARNINGS PER SHARE AND SHAREHOLDERS' EQUITY

Earnings per Share

A reconciliation of the numerators and denominators used in our basic and diluted EPS calculation is as follows (in millions):

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Numerator:			
Net income	\$ 146.1	\$ 131.0	\$ 119.6
Denominator:			
Weighted average shares outstanding for basic EPS	136.0	137.8	142.3
Dilutive effect of share-based awards	0.5	0.5	0.3
Weighted average shares outstanding for diluted EPS	<u>136.5</u>	<u>138.3</u>	<u>142.6</u>
Anti-dilutive share-based awards excluded from computation of diluted EPS	1.5	1.4	0.8

Shareholders' Equity

Our common stock consists of ordinary shares of Perrigo Company plc, a public limited company incorporated under the laws of Ireland.

We trade our ordinary shares on the New York Stock Exchange under the symbol PRGO. Our ordinary shares are also traded on the Tel Aviv Stock Exchange.

Dividends

We paid dividends as follows:

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Dividends paid (in millions)	\$ 112.4	\$ 104.9	\$ 91.1
Dividends paid (per share)	\$ 0.82	\$ 0.76	\$ 0.64

The declaration and payment of dividends and the amount paid, if any, are subject to the discretion of the Board of Directors and depend on our earnings, financial condition, availability of distributable reserves, capital and surplus requirements and other factors the Board of Directors may consider relevant.

Share Repurchases

In October 2015, the Board of Directors approved a three-year share repurchase plan of up to \$2.0 billion. Following the expiration of our 2015 share repurchase plan authorization, in October 2018, our Board of Directors authorized up to \$1.0 billion of share repurchases with no expiration date, subject to the Board of Directors' approval of the pricing parameters and amount that may be repurchased under each specific share repurchase program. We did not repurchase any shares during the year ended December 31, 2019. During the year ended December 31, 2018, we repurchased 5.1 million ordinary shares at an average repurchase price of \$77.93 per share, for a total of \$400.0 million. During the year ended December 31, 2017, we repurchased 2.7 million ordinary shares at an average repurchase price of \$71.72 per share, for a total of \$191.5 million.

NOTE 13 - SHARE-BASED COMPENSATION PLANS

All share-based compensation for employees and directors is granted under the 2019 Long-Term Incentive Plan, as amended (the "Plan"). The Plan has been approved by our shareholders and provides for the granting of awards to our employees and directors. The purpose of the Plan is to attract and retain individuals of exceptional talent and encourage these individuals to acquire a vested interest in our success and prosperity. The awards that may be granted under this program include non-qualified stock options, restricted stock, restricted share units, and performance share units based on relative total shareholder return ("RTSR"). Restricted shares are generally service-based, requiring a certain length of service before vesting occurs, while restricted share units can be either service-based or performance-based. Performance-based restricted share units require a certain length of service until vesting; however, they contain an additional performance feature, which can vary the amount of shares ultimately paid out based on certain performance criteria specified in the Plan. RTSR performance share units are subject to a market condition. Awards granted under the Plan vest and may be exercised and/or sold from one year to ten years after the date of grant based on a vesting schedule. As of December 31, 2019, there were 7.2 million shares available to be granted.

Share-based compensation expense was as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 52.2	\$ 37.7	\$ 43.8

As of December 31, 2019, unrecognized share-based compensation expense was \$50.6 million, and the weighted-average period over which the expense is expected to be recognized was approximately 1.8 years. Proceeds from the exercise of stock options are credited to ordinary shares.

Stock Options

A summary of activity related to stock options is presented below (options in thousands):

	Number of Options	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Term in Years	Aggregate Intrinsic Value
Options outstanding at December 31, 2017	1,072	\$ 94.90		
Granted	521	\$ 82.43		
Exercised	(33)	\$ 42.06		
Forfeited or expired	(26)	\$ 97.82		
Options outstanding at December 31, 2018	1,534	\$ 91.56	6.9	\$ 0.1
Granted	—	\$ —		
Exercised	(27)	\$ 34.30		
Forfeited or expired	(43)	\$ 99.58		
Options outstanding December 31, 2019	1,464	\$ 92.33	5.8	\$ —
Options exercisable	1,012	\$ 98.27	5.3	\$ —
Options expected to vest	437	\$ 79.11	7.0	\$ —

The aggregate intrinsic value for options exercised was as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 0.5	\$ 1.1	\$ 1.7

The weighted-average fair value per share at the grant date for options granted was as follows:

Year Ended	
December 31, 2018	December 31, 2017
\$ 24.43	\$ 19.50

The fair value was estimated using the Black-Scholes option pricing model with the following weighted-average assumptions:

	Year Ended	
	December 31, 2018	December 31, 2017
Dividend yield	0.8%	0.9%
Volatility, as a percent	31.2%	30.0%
Risk-free interest rate	2.8%	1.8%
Expected life in years	5.6	5.4

The valuation model utilizes historical volatility. The risk-free interest rate is based on the yield of U.S. government securities with a maturity date that coincides with the expected term of the option. The expected life in years is estimated based on past exercise behavior of employees.

Non-Vested Service-Based Restricted Share Units

A summary of activity related to non-vested service-based restricted share units is presented below (units in thousands):

	Number of Non-vested Service- Based Share Units	Weighted- Average Grant Date Fair Value Per Share	Weighted- Average Remaining Term in Years	Aggregate Intrinsic Value
Non-vested service-based share units outstanding at December 31, 2017	599	\$ 107.26		
Granted	385	\$ 81.51		
Vested	(204)	\$ 121.10		
Forfeited	(52)	\$ 107.31		
Non-vested service-based share units outstanding at December 31, 2018	728	\$ 89.47	1.4	\$ 28.2
Granted	818	\$ 47.48		
Vested	(269)	\$ 95.09		
Forfeited	(66)	\$ 71.03		
Non-vested service-based share units outstanding at December 31, 2019	1,211	\$ 60.96	1.4	\$ 62.5

The weighted-average fair value per share at the date of grant for service-based restricted share units granted was as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 47.48	\$ 81.51	\$ 70.55

The total fair value of service-based restricted share units that vested was as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 25.6	\$ 24.6	\$ 14.5

Non-Vested Performance-Based Restricted Share Units

A summary of activity related to non-vested performance-based restricted share units is presented below (units in thousands):

	Number of Non-vested Performance- Based Share Units	Weighted- Average Grant Date Fair Value Per Share	Weighted- Average Remaining Term in Years	Aggregate Intrinsic Value
Non-vested performance-based share units outstanding at December 31, 2017	303	\$ 93.65		
Granted	207	\$ 85.01		
Vested	(13)	\$ 176.59		
Forfeited	(55)	\$ 85.94		
Non-vested performance-based share units outstanding at December 31, 2018	442	\$ 86.61	1.5	\$ 17.2
Granted	298	\$ 47.54		
Vested	(68)	\$ 116.35		
Forfeited	(19)	\$ 72.83		
Non-vested performance-based share units outstanding at December 31, 2019	653	\$ 61.44	1.5	\$ 33.7

The weighted-average fair value of performance-based restricted share units can fluctuate depending upon the success or failure of the achievement of performance criteria as set forth in the Plan. The weighted-average fair value per share at the date of grant for performance-based restricted share units granted was as follows:

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 47.54	\$ 85.01	\$ 70.34

The total fair value of performance-based restricted share units that vested was as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 8.0	\$ 2.4	\$ 3.8

Non-vested Relative Total Shareholder Return Performance Share Units

The fair value of the RTSR performance share units is determined using the Monte Carlo pricing model as the number of shares to be awarded is subject to a market condition. The valuation model considers a range of possible outcomes, and compensation cost is recognized regardless of whether the market condition is actually satisfied.

The assumptions used in estimating the fair value of the RTSR performance share units granted during each year were as follows:

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Dividend yield	1.6%	0.9%	0.9%
Volatility, as a percent	40.2%	35.3%	36.1%
Risk-free interest rate	1.9%	2.4%	1.4%
Expected life in years	2.4	2.8	2.6

A summary of activity related to non-vested RTSR performance share units is presented below (units in thousands):

	Number of Non-vested RTSR Performance Share Units	Weighted- Average Grant Date Fair Value Per Share	Weighted- Average Remaining Term in Years*	Aggregate Intrinsic Value
Non-vested RTSR performance share units outstanding at December 31, 2017	39	\$ 64.82		
Granted	38	\$ 101.13		
Forfeited	(15)	\$ 101.13		
Non-vested RTSR performance share units outstanding at December 31, 2018	62	\$ 78.35	1.7	\$ 2.4
Granted	80	\$ 55.61		
Vested	—	\$ —		
Forfeited	—	\$ —		
Non-vested RTSR performance share units outstanding at December 31, 2019	142	\$ 63.02	1.5	\$ 7.3

* Midpoint used in calculation.

The weighted-average fair value per share at the date of grant for RTSR performance share units granted was as follows:

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 55.61	\$ 101.13	\$ 64.82

NOTE 14 - ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Changes in our AOCI balances, net of tax, were as follows (in millions):

	Fair Value of Derivative Financial Instruments, net of tax	Foreign Currency Translation Adjustments	Fair Value of Investment Securities, net of tax	Post- Retirement and Pension Liability Adjustments, net of tax	Total AOCI
Balance at December 31, 2017	\$ (9.8)	\$ 260.6	\$ 1.0	\$ 1.3	\$ 253.1
ASU 2016-01 adoption impact	—	—	(1.0)	—	(1.0)
Balance at December 31, 2017 after adoption impact	(9.8)	260.6	—	1.3	252.1
OCI before reclassifications	(7.5)	(156.1)	—	0.2	(163.4)
Amounts reclassified from AOCI	1.8	—	—	(5.9)	(4.1)
Other comprehensive (loss)	(5.7)	(156.1)	—	(5.7)	(167.5)
Balance at December 31, 2018	(15.5)	104.5	—	(4.4)	84.6
OCI before reclassifications	26.8	28.4	—	4.9	60.1
Amounts reclassified from AOCI	1.4	—	—	(6.7)	(5.3)
Other comprehensive income (loss)	28.2	28.4	—	(1.8)	54.8
Balance at December 31, 2019	\$ 12.7	\$ 132.9	\$ —	\$ (6.2)	\$ 139.4

NOTE 15 - INCOME TAXES

Pre-tax income (loss) and the (benefit) provision for income taxes from continuing operations are summarized as follows (in millions):

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Pre-tax income (loss):			
Ireland	\$ (300.3)	\$ (109.0)	\$ (454.0)
United States	(291.9)	(428.6)	(144.9)
Other foreign	763.2	828.2	879.0
Total pre-tax income	<u>171.0</u>	<u>290.6</u>	<u>280.1</u>
Current provision (benefit) for income taxes:			
Ireland	(2.2)	22.7	(8.1)
United States	51.0	66.4	100.4
Other foreign	16.1	75.1	46.1
Subtotal	<u>64.9</u>	<u>164.2</u>	<u>138.4</u>
Deferred provision (benefit) for income taxes:			
Ireland	—	(13.9)	13.1
United States	(30.2)	7.3	7.8
Other foreign	(9.8)	2.0	1.2
Subtotal	<u>(40.0)</u>	<u>(4.6)</u>	<u>22.1</u>
Total provision for income taxes	<u>\$ 24.9</u>	<u>\$ 159.6</u>	<u>\$ 160.5</u>

A reconciliation of the provision based on the Irish statutory income tax rate to our effective income tax rate is as follows:

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Provision at statutory rate	12.5%	12.5%	12.5%
Foreign rate differential	3.1	(7.1)	(93.3)
State income taxes, net of federal benefit	2.7	3.0	(1.4)
Provision to return	0.8	(1.0)	9.3
Tax credits	(2.7)	(1.3)	(0.6)
Change in tax law	(1.1)	(6.2)	10.3
Change in valuation allowance	(29.1)	51.0	17.0
Change in unrecognized taxes	(4.7)	13.8	22.2
Permanent differences	31.2	(14.1)	61.8
Taxes on unremitted earnings	3.6	3.9	17.3
Other	(1.7)	0.4	2.2
Effective income tax rate	<u>14.6%</u>	<u>54.9%</u>	<u>57.3%</u>

Pursuant to changes made by the U.S. Tax Cuts and Jobs Act ("U.S. Tax Act"), remittances from subsidiaries held by Perrigo Company U.S. made in 2018 and future years are generally not subject to U.S. federal income tax. These remittances are either excluded from U.S. taxable income as earnings that are already subject to taxation or are subject to a 100% dividends received deduction. We are indefinitely reinvested in historic U.S. earnings beyond those previously taxed in the U.S. and other unremitted earnings of our foreign subsidiaries, excluding Israel. Due to the complexity of the legal entity structure and the complexity of the tax laws in various

jurisdictions, we believe it is not practicable to estimate the additional income taxes that may be payable on the remittance of such undistributed earnings.

Deferred income taxes arise from temporary differences between the financial reporting and the tax reporting basis of assets and liabilities and operating loss and tax credit carryforwards for tax purposes. The components of our net deferred income tax asset (liability) were as follows (in millions):

	Year Ended	
	December 31, 2019	December 31, 2018
Deferred income tax asset (liability):		
Depreciation and amortization	\$ (366.7)	\$ (371.2)
Investment in partnership	(38.1)	—
Right of use assets	(30.5)	—
Unremitted earnings	(29.0)	(8.3)
Inventory basis differences	32.7	27.8
Accrued liabilities	91.3	87.1
Lease obligations	30.5	—
Share-based compensation	23.2	19.6
Federal benefit of unrecognized tax positions	20.7	18.2
Loss and credit carryforwards	373.3	359.2
R&D credit carryforwards	54.1	58.8
Interest carryforwards	60.5	76.1
Other, net	4.1	9.5
Subtotal	\$ 226.1	\$ 276.8
Valuation allowance ⁽¹⁾	(501.3)	(557.9)
Net deferred income tax liability:	<u>\$ (275.2)</u>	<u>\$ (281.1)</u>

(1) The movement in the valuation allowance balance differs from the amount in the effective tax rate reconciliation due to adjustments affecting balance sheet only items and foreign currency.

The above amounts are classified on the Consolidated Balance Sheets as follows (in millions):

	Year Ended	
	December 31, 2019	December 31, 2018
Assets	\$ 5.4	\$ 1.2
Liabilities	(280.6)	(282.3)
Net deferred income tax liability	<u>\$ (275.2)</u>	<u>\$ (281.1)</u>

We have U.S. federal and state credit carryforwards and U.S. R&D credit carryforwards of \$73.9 million as well as U.S. federal and state net operating loss carryforwards and non-U.S. net operating loss carryforwards of \$373.1 million, which will expire at various times through 2039. The remaining U.S. state credit carryforwards of \$4.1 million, U.S. federal and non-US loss carryforwards of \$1,273.3 million, and U.S. interest carryforwards of \$263.0 million have no expiration.

For the year ended December 31, 2019 we recorded a net decrease in valuation allowances of \$56.6 million, comprised primarily of a decrease in the U.S. valuation allowance related to the acquisition of Ranir and disposal of the Perrigo Animal Health business. Valuation allowances are determined based on management's assessment of its deferred tax assets that are more likely than not to be realized.

The Company operates in multiple jurisdictions with complex tax policy and regulatory environments and establishes reserves for uncertain positions in accordance with the accounting guidance governing uncertainty in income taxes. Uncertainty in a tax position may arise because tax laws are subject to interpretation. The following table summarizes the activity related to the liability recorded for uncertain tax positions, excluding interest and penalties (in millions):

	Unrecognized Tax Benefits
Balance at December 31, 2017	\$ 347.9
Additions:	
Positions related to the current year	39.4
Positions related to prior years	6.8
Reductions:	
Settlements with taxing authorities	(6.5)
Lapse of statutes of limitation	(1.1)
Decrease in prior year positions	(6.4)
Cumulative translation adjustment	(3.0)
Balance at December 31, 2018	377.1
Additions:	
Positions related to the current year	8.2
Positions related to prior years	3.1
Reductions:	
Settlements with taxing authorities	(3.0)
Lapse of statutes of limitation	(23.5)
Decrease in prior year positions	(12.1)
Cumulative translation adjustment	0.7
Balance at December 31, 2019	<u>\$ 350.5</u>

We recognize interest and penalties related to uncertain tax positions as a component of income tax expense. The total amount accrued for interest and penalties in the liability for uncertain tax positions was \$98.1 million, \$86.8 million, and \$82.0 million as of December 31, 2019, December 31, 2018, and December 31, 2017, respectively.

If recognized, of the total liability for uncertain tax positions, \$204.6 million, \$203.7 million, and \$204.0 million as of December 31, 2019, December 31, 2018, and December 31, 2017, respectively, would impact the effective tax rate in future periods.

Our major income tax jurisdictions are Ireland, the U.S., Israel, Belgium, France, and the United Kingdom. We are routinely audited by the tax authorities in our major jurisdictions. We have substantially concluded all Ireland income tax matters through the year ended December 31, 2011, all U.S. federal income tax matters through the year ended June 28, 2008, all Israel income tax matters through the year ended June 28, 2014. All significant matters in our remaining major tax jurisdictions have been concluded for tax years through 2016.

IRS Audit of Fiscal Years Ended June 29, 2013, June 28, 2014, and June 27, 2015

On August 22, 2019, we received a draft Notice of Proposed Adjustment (“NOPA”) from the IRS with respect to our fiscal tax years ended June 28, 2014 and June 27, 2015 relating to the deductibility of interest on \$7.5 billion in debts owed to Perrigo Company plc by Perrigo Company, a Michigan corporation and wholly-owned indirect subsidiary of Perrigo Company, plc. The debts were incurred in connection with the Elan merger transaction in 2013. The draft NOPA would cap the interest rate on the debts for U.S. federal tax purposes at 130.0% of the Applicable Federal Rate (a blended rate reduction of 4.0% per annum from the rates agreed to by the parties), on the stated ground that the loans were not negotiated on an arms'-length basis. As a result of the proposed interest rate reduction, the draft NOPA proposes a reduction in gross interest expense of approximately \$480.0 million for fiscal years 2014 and 2015. If the IRS were to prevail in its proposed adjustment, we estimate an increase in tax

expense for such fiscal years of approximately \$170.0 million, excluding interest and penalties. In addition, we would expect the IRS to seek similar adjustments for the period from June 28, 2015 through December 31, 2019. If those further adjustments were sustained, based on our preliminary calculations and subject to further analysis, our current best estimate is that the additional tax expense would not exceed \$200.0 million, excluding interest and penalties, for the period June 28, 2015 through December 31, 2019. We do not expect any similar adjustments beyond December 31, 2019 as proposed regulations, issued under section 267A of the Internal Revenue Code, would eliminate the deductibility of interest on this debt. We strongly disagree with the IRS position and will pursue all available administrative and judicial remedies. No payment of any amount related to the proposed adjustments is required to be made, if at all, until all applicable proceedings have been completed.

Following receipt of the draft NOPA, Perrigo provided the IRS with a detailed written response on September 20, 2019. That submission included an analysis by external advisors that supported the original interest rates as being consistent with arms'-length rates for comparable debt and explained why the exam team's analyses and conclusions were both factually and legally misguided. Based on discussions with the IRS, we had believed that the IRS staff would take our submission into account and meet with us to discuss whether this issue could be resolved at the examination level. However, in the weeks following such discussions, IRS staff advised that they would not respond in detail to our September submission or negotiate the interest rate issue prior to issuing a final NOPA consistent with the draft NOPA. Accordingly, we currently expect that we will receive a final NOPA regarding this matter that proposes substantially the same adjustments described in the draft NOPA.

IRS Audit of Fiscal Years ended June 27, 2009, June 26, 2010, June 25, 2011, and June 30, 2012

On August 15, 2017, we filed a complaint in the United States District Court for the Western District of Michigan to recover \$163.6 million of Federal income tax, penalties, and interest assessed and collected by the IRS, plus statutory interest thereon from the dates of payment, for the fiscal tax years ended June 27, 2009, June 26, 2010, June 25, 2011, and June 30, 2012 (the "2009 tax year," "2010 tax year," "2011 tax year," and "2012 tax year," respectively). In response to our complaint, the United States District Court for Western District of Michigan has scheduled a trial date for late May 2020. The IRS audits of those years culminated in the issuances of two statutory notices of deficiency: (1) on August 27, 2014 for the 2009 and 2010 tax years and (2) on April 20, 2017 for the 2011 and 2012 tax years. The statutory notices of deficiency both included un-agreed income adjustments related principally to transfer pricing adjustments regarding the purchase, distribution, and sale of store-brand OTC pharmaceutical products in the United States. In addition, the statutory notice of deficiency for the 2011 and 2012 tax years included the capitalization of certain expenses that were deducted when paid or incurred in defending against certain patent infringement lawsuits. We fully paid the assessed amounts of tax, interest, and penalties set forth in the statutory notices and filed timely claims for refund on June 11, 2015 and June 7, 2017 for the 2009-2010 tax years and 2011-2012 tax years, respectively. Upon the disallowance of such refund claims, we timely filed the above complaint, which seeks refunds of tax, interest, and penalties of \$37.2 million for the 2009 tax year, \$61.5 million for the 2010 tax year, \$40.2 million for the 2011 tax year, and \$24.7 million for the 2012 tax year. The amounts sought in the complaint for the 2009 and 2010 tax years were recorded as deferred charges in Other non-current assets on our balance sheet during the three months ended March 28, 2015, and the amounts sought in the complaint for the 2011 and 2012 tax years were recorded as deferred charges in Other non-current assets on our balance sheet during the three months ended July 1, 2017. The cumulative deferred charge as recorded on the balance sheet is \$29.7 million lower than the amounts reflected above due to overpayments credited to succeeding years, such that the actual refund the company is seeking to receive will be reduced by that amount. In addition, we recently conceded a royalty due to Perrigo U.S. on all omeprazole sales that equates to 24% of the above refund claims and any omeprazole adjustments that may be asserted by the IRS for future years.

IRS Audit of Fiscal Years Ended December 31, 2011, December 31, 2012, and December 31, 2013

On April 26, 2019, we received a revised NOPA from the IRS regarding transfer pricing positions related to the IRS audit of Athena for the years ended December 31, 2011, December 31, 2012, and December 31, 2013. The NOPA carries forward the IRS's theory from its 2017 draft NOPA that when Elan took over the future funding of Athena's in-process research and development after acquiring Athena in 1996, Elan should have paid a substantially higher royalty rate for the right to exploit Athena's intellectual property, rather than rates based on transfer pricing documentation prepared by Elan's external tax advisors. The NOPA proposes a payment of \$843.0 million, which represents additional tax and a 40.0% penalty. This amount excludes consideration of offsetting tax attributes and potentially material interest. We strongly disagree with the IRS position and will pursue all available

administrative and judicial remedies, including potentially those available under the U.S. - Ireland Income Tax Treaty to alleviate double taxation. No payment of the additional amounts is required until the matter is resolved administratively, judicially, or through treaty negotiation.

On December 22, 2016, we received a NOPA from the IRS regarding the deductibility of litigation costs related to the IRS audit of Athena for the years ended December 31, 2011, December 31, 2012, and December 31, 2013. We disagree with the IRS's position asserted in the NOPA and are contesting it.

Irish Revenue Audit of Fiscal Years Ended December 31, 2012 and December 31, 2013

On October 30, 2018, we received an audit finding letter from the Irish Office of the Revenue Commissioners ("Irish Revenue") for the years ended December 31, 2012 and December 31, 2013. The audit finding letter relates to the tax treatment of the 2013 sale of the Tysabri® intellectual property and other assets related to Tysabri® to Biogen Idec from Elan Pharma. The consideration paid by Biogen to Elan Pharma took the form of an upfront payment and future contingent royalty payments. Irish Revenue issued a Notice of Amended Assessment ("NoA") on November 29, 2018 which assesses an Irish corporation tax liability against Elan Pharma in the amount of €1,636 million, not including interest or any applicable penalties.

We disagree with this assessment and believe that the NoA is without merit and incorrect as a matter of law. We filed an appeal of the NoA on December 27, 2018 and will pursue all available administrative and judicial avenues as may be necessary or appropriate. In connection with that, Elan Pharma was granted leave by the Irish High Court on February 25, 2019 to seek judicial review of the issuance of the NoA by Irish Revenue. The judicial review filing is based on our belief that Elan Pharma's legitimate expectations as a taxpayer have been breached, not on the merits of the NoA itself. The High Court has scheduled a hearing in this judicial review proceeding in April 2020, and we would expect a decision in this matter in the second half of 2020. If we are ultimately successful in the judicial review proceedings, the NoA will be invalidated and Irish Revenue will not be able to re-issue the NoA. The proceedings before the Tax Appeals Commission have been stayed until a decision on the judicial review application has been made. If for any reason the judicial review proceedings are ultimately unsuccessful in establishing that Irish Revenue's issuance of the NoA breaches our legitimate expectations, Elan Pharma will reactivate its appeal to challenge the merits of the NoA before the Tax Appeals Commission.

The Israel Tax Authority is auditing our fiscal tax years ended June 27, 2015, December 31, 2015, December 31, 2016 and December 31, 2017.

Although we believe that our tax estimates are reasonable and that we prepare our tax filings in accordance with all applicable tax laws, the final determination with respect to any tax audit and any related litigation could be materially different from our estimates or from our historical income tax provisions and accruals. The results of an audit or litigation could have a material effect on operating results and/or cash flows in the periods for which that determination is made. In addition, future period earnings may be adversely impacted by litigation costs, settlements, penalties, and/or interest assessments.

Based on the final resolution of tax examinations, judicial or administrative proceedings, changes in facts or law, expirations of statute of limitations in specific jurisdictions or other resolutions of, or changes in, tax positions - one or more of which may occur within the next twelve months - it is reasonably possible that unrecognized tax benefits for certain tax positions taken on previously filed tax returns may change materially from those recorded as of December 31, 2019. However, we are not able to estimate a reasonably possible range of how these events may impact our unrecognized tax benefits in the next twelve months.

Recent Tax Law Changes

On December 22, 2017, the United States enacted the U.S. Tax Act. The U.S. Tax Act includes a number of significant changes to existing U.S. tax laws that impact us. These changes include a corporate income tax rate reduction from 35% to 21% and the elimination or reduction of certain U.S. deductions and credits including limitations on the U.S. deductibility of interest expense and executive compensation. The U.S. Tax Act also transitions the U.S. taxation of international earnings from a worldwide system to a modified territorial system. These changes were effective beginning in 2018. The U.S. Tax Act also includes a one-time mandatory deemed repatriation tax on accumulated U.S. owned foreign corporations' previously untaxed foreign earnings ("Transition

Toll Tax"). We paid our full Transition Toll Tax liability as of December 31, 2018.

On December 22, 2017, Staff Accounting Bulletin No. 118 ("SAB 118") was issued to address the application of the U.S. GAAP ASC 740 income tax accounting for tax law changes enacted in the U.S. during 2017, in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the U.S. Tax Act. In accordance with SAB 118, for the year ended December 31, 2018, we recorded an income tax benefit of \$2.4 million in connection with the remeasurement of certain deferred tax assets and liabilities and also recorded a \$17.5 million increase of current tax expense in connection with the Transition Toll Tax on cumulative U.S. owned foreign earnings of \$1.2 billion. For the year ended December 31, 2018, we completed the accounting for the income tax effects of the U.S. Tax Act. Based on additional guidance issued by the IRS and updates to our calculations we recorded a benefit of \$6.3 million related to the Transition Toll Tax. There were no other material changes to the amounts recorded at December 31, 2018. We also finalized the provisional estimate related to our assertion on unremitted earnings of foreign subsidiaries recording an additional deferred tax liability of \$8.3 million for the state income tax impacts of repatriating undistributed foreign earnings.

The U.S. Tax Act subjects a U.S. shareholder to tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. The FASB Staff Q&A, Topic 740, No. 5, Accounting for Global Intangible Low-Taxed Income states that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or provide for the tax expense related to GILTI in the year the tax is incurred. We have elected an accounting policy to provide for the tax expense related to GILTI in the year the tax is incurred ("period cost method").

On December 22, 2017, the Belgian Parliament approved Belgian tax reform legislation ("Belgium Tax Act"), which was signed by the Belgian King and enacted on December 25, 2017. The Belgium Tax Act provides for a reduction to the corporate income tax rate from 34% to 30%, for 2018 and 2019, as well as a reduced corporate income tax rate of 25% for 2020 and beyond. The Belgium Tax Act also increased the participation exemption on dividend distributions to Belgium entities from 95% to 100%. The Belgium Tax Act also introduces Belgium tax consolidation and other anti-tax avoidance directives. For the year ended December 31, 2018, we recorded additional income tax expense of \$24.1 million for the remeasurement of certain deferred tax assets and additional income tax benefit of \$33.2 million for the remeasurement of certain deferred tax liabilities as a result of the Belgium Tax Act. Lastly, for the year ended December 31, 2018, we fully reversed the deferred tax liability recorded for Belgian Fairness Tax assessment on unrepatriated earnings, as this tax was ruled unconstitutional in the first quarter of 2018.

On January 1, 2019, we adopted ASU 2018-02 Income Statement - Reporting Comprehensive Income. Upon adoption, we did not elect to reclassify the income tax effects of the U.S. Tax Cuts and Jobs Act from AOCI to Retained earnings (accumulated deficit).

NOTE 16 - POST-EMPLOYMENT PLANS

Defined Contribution Plans

We have a qualified profit-sharing and investment plan under Section 401(k) of the IRS, which covers substantially all U.S. employees. Our contributions to the plan include an annual nondiscretionary contribution of 3% of an employee's eligible compensation and a discretionary contribution at the option of the Board of Directors. Additionally, we match a portion of employees' contributions.

We also have a defined contribution plan that covers our Ireland employees. We contribute up to 18% of each participating employee's annual eligible salary on a monthly basis.

We assumed a number of defined contribution plans associated with the Omega acquisition and we pay contributions to the pension insurance plans.

Our contributions to all of the plans were as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 26.6	\$ 25.2	\$ 25.5

Pension and Post-Retirement Healthcare Benefit Plans

We have a liability related to two defined benefit plans (staff and executive plan) for employees based in Ireland. These plans were subsequently merged and all plan assets and liabilities were transferred from the executive scheme to the staff scheme as a result of a plan combination.

We have a liability related to a number of defined benefit plans covering employees based primarily in the Netherlands, Belgium, Germany, Switzerland, Greece and France. Omega companies operate various pension plans across each country.

Our defined benefit pension plans are managed externally and the related pension costs and liabilities are assessed at least annually in accordance with the advice of a qualified professional actuary. We used a December 31, 2019 measurement date and all plan assets and liabilities are reported as of that date.

We provide certain healthcare benefits to eligible U.S. employees and their dependents who meet certain age and service requirements when they retire. Generally, benefits are provided to eligible retirees after age 65 and to their dependents. Increases in our contribution for benefits are limited to increases in the Consumer Price Index. Additional healthcare cost increases are paid through participant contributions. We accrue the expected costs of such benefits during a portion of the employees' years of service. The plan is not funded. Under current plan provisions, the plan is not eligible for any U.S. federal subsidy related to the Medicare Modernization Act of 2003 Part D Subsidy.

The change in the projected benefit obligation and plan assets consisted of the following (in millions):

	Pension Benefits		Other Benefits	
	Year Ended		Year Ended	
	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Projected benefit obligation at beginning of period	\$ 168.6	\$ 174.0	\$ 5.6	\$ 6.2
Curtailement	(2.5)	(1.2)	—	—
Service costs	2.5	3.0	0.6	0.6
Interest cost	3.8	3.8	0.2	0.2
Actuarial loss (gain)	22.7	(1.6)	0.3	(1.3)
Amendments	—	—	(2.9)	—
Contributions paid	0.3	0.3	—	—
Benefits paid	(1.6)	(1.6)	(0.1)	(0.1)
Settlements	(3.8)	(0.5)	—	—
Foreign currency translation	(3.1)	(7.6)	—	—
Projected benefit obligation at end of period	\$ 186.9	\$ 168.6	\$ 3.7	\$ 5.6
Fair value of plan assets at beginning of period	151.9	162.5	—	—
Actual return on plan assets	19.8	(3.1)	—	—
Benefits paid	(1.6)	(1.6)	(0.1)	(0.1)
Settlements	(3.8)	(0.5)	—	—
Employer contributions	2.0	1.2	0.1	0.1
Contributions paid	0.3	0.3	—	—
Foreign currency translation	(3.2)	(6.9)	—	—
Fair value of plan assets at end of period	\$ 165.4	\$ 151.9	\$ —	\$ —
Unfunded status	\$ (21.5)	\$ (16.7)	\$ (3.7)	\$ (5.6)
Presented as:				
Other non-current assets	\$ 15.8	\$ 15.7	\$ —	\$ —
Other non-current liabilities	\$ (37.3)	\$ (32.4)	\$ —	\$ —

The total accumulated benefit obligation for the defined benefit pension plans was as follows (in millions):

Year Ended	
December 31, 2019	December 31, 2018
\$ 180.8	\$ 163.2

The following unrecognized actual gain for the other benefits liability was included in OCI, net of tax (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 2.6	\$ 1.3	\$ 0.3

The unamortized net actuarial loss (gain) in AOCI net of tax for defined benefit pension and other benefits was as follows (in millions):

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
\$ 6.2	\$ 4.4	\$ (1.3)

The total estimated credit amount to be recognized from AOCI into net periodic cost during the next year is \$0.8 million.

At December 31, 2019, the total estimated future benefit payments to be paid by the plans for the next five years is approximately \$11.9 million for pension benefits and \$0.9 million for other benefits as follows (in millions):

Payment Due	Pension Benefits	Other Benefits
2020	\$ 2.0	\$ 0.1
2021	1.9	0.2
2022	2.4	0.2
2023	2.3	0.2
2024	3.3	0.2
Thereafter	22.8	1.3

The expected benefits to be paid are based on the same assumptions used to measure our benefit obligation at December 31, 2019, including the expected future employee service. We expect to contribute \$2.3 million to the defined benefit plans within the next year.

Net periodic pension cost consisted of the following (in millions):

	Pension Benefits			Other Benefits		
	Year Ended			Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2019	December 31, 2018	December 31, 2017
Service cost	\$ 2.5	\$ 3.0	\$ 4.5	\$ 0.6	\$ 0.6	\$ 0.6
Interest cost	3.8	3.8	3.3	0.2	0.2	0.2
Expected return on assets	(4.9)	(5.3)	(4.3)	—	—	—
Settlement	0.9	—	—	—	—	—
Curtailment	(2.5)	(1.2)	(0.7)	—	—	—
Net actuarial loss	0.8	0.6	0.8	(0.3)	(0.1)	(0.1)
Net periodic pension cost	\$ 0.6	\$ 0.9	\$ 3.6	\$ 0.5	\$ 0.7	\$ 0.7

The components of the net periodic pension cost, other than the service cost component, are included in the line item Other (income) expense, net in the Consolidated Statement of Operations.

The weighted-average assumptions used to determine net periodic pension cost and benefit obligation were:

	Pension Benefits			Other Benefits		
	Year Ended			Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017	December 31, 2019	December 31, 2018	December 31, 2017
Discount rate	1.06%	2.04%	1.91%	4.25%	3.59%	3.59%
Inflation	1.18%	1.45%	1.45%			
Expected return on assets	2.54%	2.94%	2.90%			

The discount rate is based on market yields at the valuation date and chosen with reference to the yields available on high quality corporate bonds, with regards to the duration of the plan's liabilities.

As of December 31, 2019, the expected weighted-average long-term rate of return on assets of 2.5% was calculated based on the assumptions of the following returns for each asset class:

Equities	5.9%
Bonds	1.8%
Absolute return fund	4.0%
Insurance contracts	2.5%
Other	1.5%

The investment mix of the pension plans' assets is a blended asset allocation, with a diversified portfolio of shares listed and traded on recognized exchanges.

Certain of our plans have target asset allocation ranges. As of December 31, 2019, these ranges were as follows:

Equities	20%-30%
Bonds	30%-40%
Absolute return	40%-50%

Other plans do not have target asset allocation ranges, for such plans, the strategy is to invest mainly in Insurance Contracts.

The purpose of the pension funds is to provide a flow of income for members in retirement. A flow of income delivered through fixed interest bonds provides a costly but close match to this objective. Equities are held within the portfolio as a means of reducing this cost, but holding equities creates a strategic risk because they give a very different pattern of return. Property investments are held to help diversify the portfolio. Investment risk is measured and monitored on an ongoing basis through annual liability measurements, periodic asset/liability studies, and investment portfolio reviews.

The following table sets forth the fair value of the pension plan assets (in millions):

	Year Ended							
	December 31, 2019				December 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Equities	\$ 0.1	\$ 24.5	\$ —	\$ 24.6	\$ 0.1	\$ 16.2	\$ —	\$ 16.3
Bonds	1.1	32.7	—	33.8	1.0	28.6	—	29.6
Insurance contracts	—	—	56.1	56.1	—	—	49.9	49.9
Absolute return fund	—	44.9	—	44.9	—	50.5	—	50.5
Other	—	6.0	—	6.0	—	5.6	—	5.6
Total	\$ 1.2	\$ 108.1	\$ 56.1	\$ 165.4	\$ 1.1	\$ 100.9	\$ 49.9	\$ 151.9

The following table sets forth a summary of the changes in the fair value of the Level 3 pension plan assets, which were measured at fair value on a recurring basis (in millions):

	Year Ended	
	December 31, 2019	December 31, 2018
Assets at beginning of year	\$ 49.9	\$ 50.8
Actual return on plan assets	8.1	0.6
Purchases, sales and settlements, net	(0.5)	0.4
Foreign exchange	(1.4)	(1.9)
Assets at end of year	\$ 56.1	\$ 49.9

The fair value of the insurance contracts is an estimate of the amount that would be received in an orderly sale to a market participant at the measurement date. The amount the plan would receive from the contract holder if the contracts were terminated is the primary input and is unobservable. The insurance contracts are therefore classified as Level 3 investments.

Deferred Compensation Plans

We have non-qualified plans related to deferred compensation and executive retention that allow certain employees and directors to defer compensation subject to specific requirements. Although the plans are not formally funded, we own insurance policies that had a cash surrender value of \$34.4 million and \$31.5 million at December 31, 2019 and December 31, 2018, respectively, that are intended as a long-term funding source for these plans. The assets, which are recorded in Other non-current assets, are not a committed funding source and may, under certain circumstances, be subject to claims from creditors. The deferred compensation liability of \$31.3 million and \$28.8 million at December 31, 2019 and December 31, 2018, respectively, was recorded in Other non-current liabilities.

NOTE 17 - COMMITMENTS AND CONTINGENCIES

We lease certain assets, principally warehouse facilities and computer equipment, under agreements that expire at various dates through the year ended December 31, 2032. Certain leases contain provisions for renewal and purchase options and require us to pay various related expenses. The annual future maturities of our leases as of December 31, 2019 was \$158.2 million (refer to [Note 10](#)).

Rent expense under all leases was \$48.8 million, \$51.2 million, and \$50.9 million for the years ended December 31, 2019, December 31, 2018, and December 31, 2017, respectively.

At December 31, 2019, we had non-cancelable purchase obligations totaling \$845.9 million consisting of contractual commitments to purchase materials and services to support operations. The majority of the obligations are expected to be paid within one year.

In view of the inherent difficulties of predicting the outcome of various types of legal proceedings, we cannot determine the ultimate resolution of the matters described below. We establish reserves for litigation and regulatory matters when losses associated with the claims become probable and the amounts can be reasonably estimated. The actual costs of resolving legal matters may be substantially higher or lower than the amounts reserved for those matters. For matters where the likelihood or extent of a loss is not probable or cannot be reasonably estimated as of December 31, 2019, we have not recorded a loss reserve. If certain of these matters are determined against us, there could be a material adverse effect on our financial condition, results of operations, or cash flows. We currently believe we have valid defenses to the claims in these lawsuits and intend to defend these lawsuits vigorously regardless of whether or not we have a loss reserve. Other than what is disclosed below, we do not expect the outcome of the litigation matters to which we are currently subject to, individually or in the aggregate, have a material adverse effect on our financial condition, results of operations, or cash flows.

Price-Fixing Lawsuits

We are a defendant in several cases in the generic pricing multidistrict litigation *MDL No. 2724 (United States District Court for Eastern District of Pennsylvania)*. This multidistrict litigation, which has many cases that do not include Perrigo, includes class action and opt-out cases for federal and state antitrust claims.

We have been named as a co-defendant with certain other generic pharmaceutical manufacturers in a number of class actions alleging single-product conspiracies to fix or raise the prices of certain drugs and/or allocate customers starting, in some instances, as early as June 2013. The class actions were filed on behalf of putative classes of (a) direct purchasers, (b) end payors, and (c) indirect resellers. The products in question are Clobetasol gel, Desonide, and Econazole. Pursuant to the court's schedule staging various cases in phases, we moved to dismiss the complaints relating to Clobetasol and Econazole. The court issued a decision denying the motions in part in October 2018 and issued a second decision in February 2019 dismissing various state law claims, but allowing other state law claims to proceed. We filed answers to the Clobetasol gel complaints on December 31, 2018. We filed answers to the Desonide and Econazole complaints on March 15, 2019. The cases are proceeding in document discovery.

The same three putative classes have each filed complaints naming us as a co-defendant, along with 27 other manufacturers, alleging an overarching conspiracy to fix or raise the prices of 15 generic prescription pharmaceutical products starting in 2011. Perrigo manufactures only two of the products at issue, Nystatin cream and Nystatin ointment. Motions to dismiss certain single-product and overarching complaints listed above were filed on February 21, 2019. Plaintiffs' oppositions were due on May 2, 2019 and defendants' replies were filed on June 13, 2019. On August 15, 2019, the Court denied the Defendants' joint motions to dismiss certain overarching conspiracy allegations. The cases are proceeding in document discovery.

In December 2019, both the end payor and indirect reseller class plaintiffs filed new overarching complaints against us, dozens of other manufacturers of generic prescription pharmaceuticals, and certain individuals. The complaints also allege conspiracies relating to the sale of various new products, the majority of which Perrigo neither makes nor sells. The indirect reseller complaint alleges that Perrigo conspired in connection with its sales of Immiquimod cream, Desonide cream and ointment, and Hydrocortisone Valerate cream. The end payor complaint alleges that Perrigo conspired in connection with its sale of the following drugs: Betamethasone Dipropionate, Bromocriptine Mesylate, Clindamycin Phosphate, Fenofibrate, Halobetasol Propionate, Hydrocortisone Valerate, Permethrin, and Triamcinolone Acetonide.

We have also been named a co-defendant along with 35 other manufacturers in a complaint filed by three supermarket chains alleging that defendants conspired to fix prices of 31 generic prescription pharmaceutical products starting in 2013. The only allegations specific to us relate to Clobetasol, Desonide, Econazole, Nystatin cream, and Nystatin ointment. Perrigo moved to dismiss this complaint on February 21, 2019. The motion was denied on August 15, 2019. The case is proceeding in document discovery.

On August 3, 2018, a large managed care organization filed a complaint against us alleging price-fixing and customer allocation concerning 17 different products among 27 manufacturers including Perrigo. The only allegations specific to us concern Clobetasol. Perrigo moved to dismiss this complaint on February 21, 2019. The motion was denied on August 15, 2019. The case is proceeding in document discovery.

On July 18, 2019, 87 health plans filed a Praecipe to Issue Writ of Summons in Pennsylvania state court to commence an action against 53 generic pharmaceutical manufacturers and 17 individuals, alleging antitrust violations concerning generic pharmaceutical drugs. While Perrigo was named as a defendant, no complaint has been filed. A stipulation is currently being drafted to defer further action pending developments in the Generics Antitrust MDL described above. At this stage, we cannot reasonably predict the outcome of the liability, if any, associated with these claims. This case has not yet been consolidated into the MDL.

On January 16, 2019, a similar suit was brought by a health insurance carrier in the U.S. District Court for the District of Minnesota alleging a conspiracy to fix prices of 30 products among 30 defendants. The only allegations specific to us concern Clobetasol gel, Desonide, Econazole, Nystatin cream, and Nystatin ointment.

On December 11, 2019, a health care service company filed a complaint against us and 38 other pharmaceutical companies alleging an overarching conspiracy to fix, raise or stabilize prices of dozens of products, most of which Perrigo neither makes nor sells. The product conspiracies allegedly involving Perrigo focus on the same products as those involved in other MDL complaints naming Perrigo: Clobetasol, Desonide, Econazole, and Nystatin cream/ointment.

On December 16, 2019, a Medicare Advantage claims recovery company filed a complaint against us and 39 other pharmaceutical companies alleging an overarching conspiracy to fix, raise or stabilize prices of dozens of products, most of which Perrigo neither makes nor sells. The product conspiracies allegedly involving Perrigo focus on the same products as those involved in other MDL complaints naming Perrigo: Clobetasol, Desonide, Econazole, and Nystatin cream/ointment. The complaint was originally filed in the District of Connecticut but will likely be consolidated into the MDL.

On December 23, 2019, several counties in New York filed an amended complaint against us and 28 other pharmaceutical companies alleging an overarching conspiracy to fix, raise or stabilize prices of dozens of products, most of which Perrigo neither makes nor sells. The product conspiracies allegedly involving Perrigo focus on the same products as those involved in other MDL complaints naming Perrigo: Clobetasol, Desonide, and Econazole. The complaint was originally filed in New York State court but was removed to federal court and will likely be consolidated into the MDL.

On December 27, 2019, a healthcare management organization filed a complaint against us and 25 other pharmaceutical companies alleging an overarching conspiracy to fix, raise or stabilize prices of dozens of products, most of which Perrigo neither makes nor sells. The product conspiracies allegedly involving Perrigo focus on the same products as those involved in other MDL complaints naming Perrigo: Clobetasol, Desonide, and Econazole. The complaint was filed originally in the Northern District of California but will likely be consolidated into the MDL.

At this stage, we cannot reasonably predict the outcome of the liability if any, associated with the claims listed above.

Securities Litigation

In the United States (cases related to events in 2015-2017)

On May 18, 2016, a shareholder filed a securities case against us and our former CEO, Joseph Papa, in the U.S. District Court for the District of New Jersey (*Roofers' Pension Fund v. Papa, et al.*). The plaintiff purported to represent a class of shareholders for the period from April 21, 2015 through May 11, 2016, inclusive. The original complaint alleged violations of Securities Exchange Act sections 10(b) (and Rule 10b-5) and 14(e) against both defendants and 20(a) control person liability against Mr. Papa. In general, the allegations concerned the actions taken by us and the former executive to defend against the unsolicited takeover bid by Mylan in the period from April 21, 2015 through November 13, 2015. The plaintiff also alleged that the defendants provided inadequate disclosure concerning alleged integration problems related to the Omega acquisition in the period from April 21, 2015 through May 11, 2016. On July 19, 2016, a different shareholder filed a securities class action against us and our former CEO, Joseph Papa, also in the District of New Jersey (*Wilson v. Papa, et al.*). The plaintiff purported to represent a class of persons who sold put options on our shares between April 21, 2015 and May 11, 2016. In general, the allegations and the claims were the same as those made in the original complaint filed in the *Roofers' Pension Fund* case described above. On December 8, 2016, the court consolidated the *Roofers' Pension Fund*

case and the *Wilson* case under the *Roofers' Pension Fund* case number. In February 2017, the court selected the lead plaintiffs for the consolidated case and the lead counsel to the putative class. In March 2017, the court entered a scheduling order.

On June 21, 2017, the court-appointed lead plaintiffs filed an amended complaint that superseded the original complaints in the *Roofers' Pension Fund* case and the *Wilson* case. In the amended complaint, the lead plaintiffs seek to represent three classes of shareholders - shareholders who purchased shares during the period April 21, 2015 through May 3, 2017 on the U.S. exchanges; shareholders who purchased shares during the same period on the Tel Aviv exchange; and shareholders who owned shares on November 12, 2015 and held such stock through at least 8:00 a.m. on November 13, 2015 (the final day of the Mylan tender offer) regardless of whether the shareholders tendered their shares. The amended complaint names as defendants us and 11 current or former directors and officers of Perrigo (Mses. Judy Brown, Laurie Brlas, Jacquelyn Fouse, Ellen Hoffing, and Messrs. Joe Papa, Marc Coucke, Gary Cohen, Michael Jandernoa, Gerald Kunkle, Herman Morris, and Donal O'Connor). The amended complaint alleges violations of Securities Exchange Act sections 10(b) (and Rule 10b-5) and 14(e) against all defendants and 20(a) control person liability against the 11 individuals. In general, the allegations concern the actions taken by us and the former executives to defend against the unsolicited takeover bid by Mylan in the period from April 21, 2015 through November 13, 2015 and the allegedly inadequate disclosure throughout the entire class period related to purported integration problems related to the Omega acquisition, alleges incorrect reporting of organic growth at the Company and at Omega, alleges price fixing activities with respect to six generic prescription pharmaceuticals, and alleges improper accounting for the Tysabri[®] royalty stream. The amended complaint does not include an estimate of damages. During 2017, the defendants filed motions to dismiss, which the plaintiffs opposed. On July 27, 2018, the court issued an opinion and order granting the defendants' motions to dismiss in part and denying the motions to dismiss in part. The court dismissed without prejudice defendants Laurie Brlas, Jacquelyn Fouse, Ellen Hoffing, Gary Cohen, Michael Jandernoa, Gerald Kunkle, Herman Morris, Donal O'Connor, and Marc Coucke. The court also dismissed without prejudice claims arising from the Tysabri[®] accounting issue described above and claims alleging incorrect disclosure of organic growth described above. The defendants who were not dismissed are Perrigo Company plc, Joe Papa, and Judy Brown. The claims (described above) that were not dismissed relate to the integration issues regarding the Omega acquisition, the defense against the Mylan tender offer, and the alleged price fixing activities with respect to six generic prescription pharmaceuticals. The defendants who remain in the case (the Company, Mr. Papa, and Ms. Brown) have filed answers denying liability, and the discovery stage of litigation has begun. We intend to defend the lawsuit vigorously.

On November 14, 2019, the court granted the lead plaintiffs' motion and certified three classes for the case: (i) all those who purchased shares between April 21, 2015 through May 2, 2017 inclusive on a U.S. exchange and were damaged thereby; (ii) all those who purchased shares between April 21, 2015 through May 2, 2017 inclusive on the Tel Aviv exchange and were damaged thereby; and (iii) all those who owned shares as of November 12, 2015 and held such stock through at least 8:00 a.m. on November 13, 2015 (whether or not a person tendered shares in response to the Mylan tender offer)(the "tender offer class"). Defendants filed a petition for leave to appeal in the Third Circuit challenging the certification of the tender offer class, and the class plaintiffs have filed an opposition. The Third Circuit has not yet determined if leave to appeal will be granted.

On November 1, 2017, Carmignac Gestion, S.A., filed a securities lawsuit against us and three individuals (former Chairman and CEO Joseph Papa, former CFO Judy Brown, and former Executive Vice President and Board member Marc Coucke). This lawsuit is not a securities class action. The case is styled *Carmignac Gestion, S.A. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The complaint asserts claims under Securities Exchange Act sections 10(b) (and Rule 10b-5), 14(e), and 18 against all defendants as well as 20(a) control person liability against the individual defendants. In general, the plaintiff's allegations focus on events during the period from April 2015 through April 2016. Plaintiff contends that the defendants provided inadequate disclosure throughout the period concerning the valuation and integration of Omega, the financial guidance provided by us during that period, our reporting about the generic prescription pharmaceutical business and its prospects, and the activities surrounding the efforts to defeat the Mylan tender offer during 2015. Many of the allegations in this case overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiff does not provide an estimate of damages. After the court issued its July 2018 opinion in the *Roofers' Pension Fund* case (described above) the parties to this case conferred about how this case should proceed. Because this plaintiff made some factual allegations that were not asserted in the *Roofers' Pension Fund* case, the parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to the common allegations in this case and the remaining defendants (the Company, Mr. Papa, and Ms.

Brown) filed a motion to dismiss addressing the additional allegations in this case. On July 31, 2019, the court granted the motion to dismiss in part and denied it in part. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability. The case is now in the discovery phase. We intend to defend the lawsuit vigorously.

On January 16, 2018, Manning & Napier Advisors, LLC filed a securities lawsuit against us and three individuals (former Chairman and CEO Joseph Papa, former CFO Judy Brown, and former Executive Vice President and Board member Marc Coucke). This lawsuit is not a securities class action. The case is styled *Manning & Napier Advisors, LLC v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The complaint asserts claims under Securities Exchange Act sections 10(b) (and Rule 10b-5) and 18 against all defendants as well as 20(a) control person liability against the individual defendants. In general, the plaintiff's allegations focus on events during the period from April 2015 through May 2017. Plaintiff contends that the defendants provided inadequate disclosure at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset. Many of the allegations in this case overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiff did not provide an estimate of damages. After the court issued its July 2018 opinion in the *Roofers' Pension Fund* case (described above) the parties to this case conferred about how this case should proceed. Because this plaintiff made some factual allegations that were not asserted in the *Roofers' Pension Fund* case, the parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to the common allegations in this case and the remaining defendants (the Company, Mr. Papa, and Ms. Brown) filed a motion to dismiss addressing the additional allegations in this case. On July 31, 2019, the court granted the motion to dismiss in part and denied it in part. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability. On January 3, 2020, the plaintiff filed a consented notice of voluntary dismissal dismissing its section 18 claims with prejudice and dismissing its 10(b) and 20(a) claims without prejudice. The Court approved the dismissal on January 7, 2020, and this case has now ended.

On January 26, 2018, two different plaintiff groups (the Mason Capital group and the Pentwater group) each filed a lawsuit against us and the same individuals who are defendants in the amended complaint in the securities class action case described above (*Roofers' Pension Fund* case). The same law firm represents these two plaintiff groups, and the two complaints are substantially similar. These two cases are not securities class actions. One case is styled *Mason Capital L.P., et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The other case is styled *Pentwater Equity Opportunities Master Fund Ltd., et al. v. Perrigo Company plc, et al.*, and also was filed in the U.S. District Court for the District of New Jersey. Both cases are assigned to the same federal judge that is hearing the class action case and the other individual cases described above (*Carmignac* and *Manning & Napier*). Each complaint asserts claims under Securities Exchange Act sections 14(e) (related to tender offer disclosures) against all defendants as well as 20(a) control person liability against the individual defendants. In general, the plaintiffs' allegations describe events during the period from April 2015 through May 2017. Plaintiffs contend that the defendants provided inadequate disclosure during the tender offer period in 2015 and point to disclosures at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset. Many of the factual allegations in these two cases overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above and the allegations in the *Carmignac* case described above. The plaintiffs do not provide an estimate of damages. After the court issued its July 2018 opinion in the *Roofers' Pension Fund* case (described above), the parties to these cases conferred about how these cases should proceed. The parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to the common allegations in these cases. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability, and the discovery stage of the cases has begun. We intend to defend the lawsuits vigorously.

On February 13, 2018, a group of plaintiff investors affiliated with Harel Insurance Investments & Financial Services, Ltd. filed a lawsuit against us and the same individuals who are defendants in the amended complaint in the securities class action case described above (*Roofers' Pension Fund* case). This lawsuit is not a securities class action. The new complaint is substantially similar to the amended complaint in the *Roofers' Pension Fund* case. The relevant period in the new complaint stretches from February 2014 to May 2, 2017. The complaint adds as defendants two individuals who served on our Board prior to 2016. The case is styled *Harel Insurance Company, Ltd., et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey and is assigned to the same federal judge that is hearing the class action cases and the four other individual cases

described above (*Carmignac, Manning & Napier, Mason Capital, and Pentwater*). The *Harel Insurance Company* complaint asserts claims under Securities Exchange Act section 10(b) (and related SEC Rule 10b-5) and section 14(e) (related to tender offer disclosures) against all defendants as well as 20(a) control person liability against the individual defendants. The complaint also asserts claims based on Israeli securities laws. In general, the plaintiffs' allegations describe events during the period from February 2014 through May 2017. Plaintiffs contend that the defendants provided inadequate disclosure during the tender offer events in 2015 and point to disclosures at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset from February 2014 until the withdrawal of past financial statements in April 2017. Many of the factual allegations in this case overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above and the allegations in the four opt out cases also described above. The plaintiffs do not provide an estimate of damages. After the court issued its July 2018 opinion in the *Roofers' Pension Fund* case (described above), the parties to this case conferred about how this case should proceed. The parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to the common allegations in this case and the remaining defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability, and the discovery stage of the litigation has begun. We intend to defend the lawsuit vigorously.

On February 16, 2018, First Manhattan Company filed a securities lawsuit against us and three individuals (former Chairman and CEO Joseph Papa, former CFO Judy Brown, and former Executive Vice President and Board member Marc Coucke). This lawsuit is not a securities class action. The case is styled *First Manhattan Co. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The case was assigned to the same judge hearing the class action case and the five other opt out cases. The complaint asserts claims under Securities Exchange Act sections 10(b) (and Rule 10b-5), 14(e), and 18 against all defendants as well as 20(a) control person liability against the individual defendants. In general, the plaintiff's allegations focus on events during the period from April 2015 through May 2017. Plaintiff contends that the defendants provided inadequate disclosure at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset. This lawsuit was filed by the same law firm that filed the *Manning & Napier Advisors* case and the *Carmignac* case described above and generally makes the same factual assertions as in the *Manning & Napier Advisors* case. Many of the allegations in this case overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiff does not provide an estimate of damages. On April 20, 2018, the plaintiff filed an amended complaint that did not materially change the factual allegations of the original complaint. After the court issued its July 2018 opinion in the *Roofers' Pension Fund* case (described above), the parties to this case conferred about how this case should proceed. Because this plaintiff made some factual allegations that were not asserted in the *Roofers' Pension Fund* case, the parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to the common allegations in this case and the remaining defendants filed a motion to dismiss addressing the additional allegations in this case. On July 31, 2019, the court granted the motion to dismiss in part and denied it in part. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability. The case is now in the discovery phase. We intend to defend the lawsuit vigorously.

On April 20, 2018, a group of plaintiff investors affiliated with TIAA-CREF filed a lawsuit against us and the same individuals who are the defendants in the *Harel Insurance* case complaint. This lawsuit is not a securities class action. The law firm representing the plaintiffs in the *Harel Insurance* case also represents the TIAA-CREF plaintiff entities in this case, and the new complaint is substantially similar to the *Harel Insurance* complaint. The relevant period in the new complaint is August 14, 2014 to May 2, 2017 inclusive. The case is styled *TIAA-CREF Investment Management, LLC., et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey and is assigned to the same federal judge that is hearing the class action case and the six other individual cases described above (*Carmignac, Manning & Napier, Mason Capital, Pentwater, Harel Insurance, and First Manhattan*). The *TIAA-CREF Investment Management* complaint asserts claims under Securities Exchange Act section 10(b) (and related SEC Rule 10b-5), section 14(e) (related to tender offer disclosures) against all defendants as well as section 20(a) control person liability against the individual defendants. In general, plaintiffs' allegations describe events during the period from August 2014 through May 2017. Plaintiffs contend that the defendants provided inadequate disclosure during the tender offer events in 2015 and point to disclosures at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and

alleged improper accounting for the Tysabri[®] asset from August 2014 until the withdrawal of past financial statements in April 2017. Many of the factual allegations in this case also overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiffs do not provide an estimate of damages. After the court issued its July 2018 opinion in the *Roofers' Pension Fund* case (described above) the parties to this case conferred about how this case should proceed. The parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to this case and the remaining defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability, and the discovery stage of the litigation has begun. We intend to defend the lawsuit vigorously.

On October 29, 2018, Nationwide Mutual Funds and Nationwide Variable Insurance Trust (both on behalf of several fund series) filed a securities lawsuit against us and two individuals (former Chairman and CEO Joseph Papa and former CFO Judy Brown). This lawsuit is not a securities class action. The case is styled *Nationwide Mutual Funds, et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The case was assigned to the same judge hearing the class action case and the seven other opt out cases. The complaint asserts claims under Securities Exchange Act sections 10(b) (and Rule 10b-5), and 14(e) against all defendants as well as 20(a) control person liability against the individual defendants. In general, the plaintiffs' allegations focus on events during the period from April 2015 through May 2017 (including the period of the Mylan tender offer). Plaintiffs contend that the defendants provided inadequate disclosure at various times during the period concerning the valuation and integration of Omega, the financial guidance provided by us during that period, and alleged price fixing activities with respect to six generic prescription pharmaceuticals. This lawsuit was filed by the same law firm that filed the *First Manhattan* case, the *Manning & Napier Advisors* case, and the *Carmignac* case described above and generally makes the same factual assertions as in the *Manning & Napier* case. The complaint does not include factual allegations that the Court dismissed in the July 2018 ruling in the *Roofers' Pension Fund* case also described above. Many of the allegations in this case also overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiff does not provide an estimate of damages. The defendants (the Company, Mr. Papa, and Ms. Brown) filed a motion to dismiss addressing the additional allegations in this case. On July 31, 2019, the court granted the motion to dismiss in part and denied it in part. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability. The case is now in the discovery phase. We intend to defend the lawsuit vigorously.

On November 15, 2018, a group of plaintiff investors affiliated with Westchester Capital Funds filed a lawsuit against us, our former Chairman and CEO Joseph Papa and our former CFO Judy Brown. This lawsuit is not a securities class action. The same law firm that represents the plaintiffs in the *Mason Capital L.P.* case and the *Pentwater Equity Opportunities Master Fund Ltd.* case (described above) represents the affiliates of the Westchester Funds in this lawsuit. The factual allegations of the complaint are substantially similar to the factual allegations of the complaints in the *Mason Capital* and in the *Pentwater* cases described above. The case is styled *WCM Alternative: Event-Drive Fund, et al. v. Perrigo Co., plc, et al.*, and is filed in the U.S. District Court for the District of New Jersey. The *WCM* case is assigned to the same federal judge that is hearing the *Roofers' Pension Fund* class action case and the eight other individual cases described above. The complaint asserts claims under Securities Exchange Act sections 10(b) (and SEC Rule 10b-5) and 14(e) against all defendants as well as 20(a) control person claims against the individual defendants. In general, the plaintiffs' allegations describe events during the period from April 2015 through May 2017. Plaintiffs contend that the defendants provided inadequate disclosure during the tender offer period in 2015 as well as up through May 3, 2017. Plaintiffs identify disclosures concerning the valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset. Many of the factual allegations in this complaint overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiffs do not provide an estimate of damages. In view of the court's July 2018 opinion in the *Roofers' Pension Fund* case (described above), the parties to this case conferred about how this case should proceed. The parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to the common allegations in this case. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability, and the discovery stage of the cases has begun. We intend to defend the lawsuit vigorously.

On November 15, 2018, a group of plaintiff investors affiliated with Hudson Bay Capital Management LP filed a lawsuit against us, our former Chairman and CEO Joseph Papa and our former CFO Judy Brown. This lawsuit is not a securities class action. The same law firm that represents the plaintiffs in the *Mason Capital L.P.*, the *Pentwater Equity Opportunities Master Fund Ltd.*, and the *WCM* cases (described above) represents the affiliates of

Hudson Bay Capital Management in this lawsuit. The factual allegations of the complaint are substantially similar to the factual allegations of the complaints in the *Mason Capital*, in the *Pentwater*, and in the *WCM* cases described above. The case is styled *Hudson Bay Master Fund Ltd., et al. v. Perrigo Co., plc, et al.*, and is filed in the U.S. District Court for the District of New Jersey. The *Hudson Bay Fund* case is assigned to the same federal judge that is hearing the *Roofers' Pension Fund* class action case and the nine other individual cases described above. The complaint asserts claims under Securities Exchange Act section 14(e) against all defendants and section 20(a) control person claims against the individual defendants. In general, the plaintiffs' allegations describe events during the period from April 2015 through May 2017. Plaintiffs contend that the defendants provided inadequate disclosure during the tender offer period in 2015 and point to disclosures at various times during the period concerning the valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri® asset. Many of the factual allegations in this complaint overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiffs do not provide an estimate of damages. In view of the court's July 2018 opinion in the *Roofers' Pension Fund* case (described above), the parties to this case conferred about how this case should proceed. The parties agreed that the ruling in the *Roofers' Pension Fund* case would apply equally to the common allegations in this case. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability, and the discovery stage of the cases has begun. We intend to defend the lawsuit vigorously.

On January 31, 2019, Schwab Capital Trust and a variety of other Schwab entities filed a securities lawsuit against us and two individuals (former Chairman and CEO Joseph Papa and former CFO Judy Brown). This lawsuit is not a securities class action. The case is styled *Schwab Capital Trust, et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The case was assigned to the same judge hearing the class action case and the ten other opt out cases. The complaint asserts claims under Securities Exchange Act sections 10(b) (and Rule 10b-5), and 14(e) against all defendants as well as 20(a) control person liability against the individual defendants. In general, the plaintiffs' allegations focus on events during the period from April 2015 through May 2017 (including the period of the Mylan tender offer). Plaintiffs contend that the defendants provided inadequate disclosure at various times during the period concerning the valuation and integration of Omega, the financial guidance provided by us during that period, and alleged price fixing activities with respect to six generic prescription pharmaceuticals. This lawsuit was filed by the same law firm that filed the *Carmignac* case, the *Manning & Napier* case, the *First Manhattan* case, and the *Nationwide Mutual Funds* case described above and generally makes the same factual assertions as in the *Nationwide Mutual Funds* case. The complaint does not include factual allegations that the court dismissed in the July 2018 ruling in the *Roofers' Pension Fund* case also described above. Many of the allegations in this case also overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiff does not provide an estimate of damages. The parties agreed that the defendants would not respond to the complaint until 45 days after the court decided the motion to dismiss then-pending in the *Carmignac*, *Manning & Napier*, *First Manhattan*, and *Nationwide Mutual* cases described above. On July 31, 2019, the court granted in part and denied in part that motion to dismiss. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability. This case has now also moved into the discovery phase. We intend to defend the lawsuit vigorously.

On February 6, 2019, OZ Master Fund, Ltd. and a related entity filed a securities lawsuit against us and two individuals (former Chairman and CEO Joseph Papa and former CFO Judy Brown). This lawsuit is not a securities class action. The case is styled *OZ Master Fund, Ltd., et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The case was assigned to the same judge hearing the class action case and the eleven other opt out cases described above. The complaint asserts claims under Securities Exchange Act sections 10(b) (and SEC Rule 10b-5), and 14(e) against all defendants as well as 20(a) control person liability against the individual defendants. In general, the plaintiffs' allegations focus on events during the period from April 2015 through May 2017 (including the period of the Mylan tender offer). Plaintiffs contend that the defendants provided inadequate disclosure at various times during the period concerning the valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri® asset. Many of the allegations in this case overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiff does not provide an estimate of damages. The parties agreed that the court's rulings in July 2018 in the *Roofers' Pension Fund* case (discussed above) and in July 2019 in the *Carmignac* and other cases (discussed above) will apply to this case as well. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability. The parties agreed to a proposed schedule, which the court approved in July

2019, by which the plaintiffs are participating in the discovery proceedings in the *Roofers' Pension Fund* case described above and the various individual cases also described above. We intend to defend the lawsuit vigorously.

On February 14, 2019, Highfields Capital I LP and related entities filed a securities lawsuit against the Company and two individuals (former Chairman and CEO Joseph Papa and former CFO Judy Brown). This lawsuit is not a securities class action. The case is styled *Highfields Capital I LP, et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of Massachusetts. The complaint asserts claims under Securities Exchange Act sections 14(e) and 18 against all defendants, as well as 20(a) control person liability against the individual defendants. The complaint also asserts Massachusetts state law claims under Massachusetts Unfair Business Methods Law (chapter 93A § 11), and Massachusetts common law claims of tortious interference with prospective economic advantage, common law fraud, negligent misrepresentation, and unjust enrichment. In general, the plaintiffs' allegations focus on events during the period from April 2015 through May 2017 (including the period of the Mylan tender offer). Plaintiffs contend that the defendants provided inadequate disclosure at various times during the period concerning the valuation and integration of Omega, the financial guidance provided by the Company during that period, and alleged improper accounting for the Tysabri[®] asset. Some of the allegations in this case overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above and with allegations in one or more of the opt out cases described above. Plaintiffs do not provide a clear calculation of how they estimated damages and seek treble damages, punitive damages, and attorney's fees. On May 7, 2019, defendants filed a motion to transfer this case to the U.S. District Court for the District of New Jersey so that the proceedings in this case can be coordinated with the other cases (discussed above) pending in that court. The transfer motion has been fully briefed and the court heard oral argument on January 29, 2020. The court has not yet ruled on the transfer motion. We intend to defend the lawsuit vigorously.

On February 22, 2019, Aberdeen Canada Funds -- Global Equity Funds (and 30 other entities, some unrelated to Aberdeen) filed a securities lawsuit against the Company and two individuals (former Chairman and CEO Joseph Papa and former CFO Judy Brown). This lawsuit is not a securities class action. The case is styled *Aberdeen Canada Funds -- Global Equity Fund, et al. v. Perrigo Company plc, et al.*, and was filed in the U.S. District Court for the District of New Jersey. The case was assigned to the same judge hearing the class action case and the twelve other opt-out cases pending in that court. The complaint asserts claims under Securities Exchange Act sections 10(b) (and Rule 10b-5) against all defendants and 20(a) control person liability against the individual defendants. In general, the plaintiffs' allegations focus on events during the period from April 2015 through May 2017 (including the period of the Mylan tender offer). Plaintiffs contend that the defendants provided inadequate disclosure at various times during the period concerning the valuation and integration of Omega, the financial guidance provided by the Company during that period, and alleged undisclosed pricing pressure for generic prescription pharmaceuticals, and alleged price fixing activities with respect to six generic prescription pharmaceuticals. This lawsuit was filed by the same law firm that filed the *Carmignac* case, the *Manning & Napier* case, the *First Manhattan* case, the *Nationwide Mutual Funds* case, and the *Schwab Capital Trust* case described above, and generally makes the same factual assertions as in the *Nationwide Mutual Funds* case. The complaint does not include factual allegations that the Court dismissed in the July 2018 ruling in the *Roofers' Pension Fund* case also described above. Many of the allegations in this case also overlap with the allegations of the June 2017 amended complaint in the *Roofers' Pension Fund* case described above. The plaintiff does not provide an estimate of damages. On July 31, 2019, the court granted in part and denied in part the motion to dismiss in the *Carmignac* and related cases, which ruling also applies to this case. The defendants (the Company, Mr. Papa, and Ms. Brown) filed answers denying liability. This case has now moved into the discovery phase. We intend to defend the lawsuit vigorously.

On December 18, 2019, Discovery Global Citizens Master Fund, Ltd., and three other funds from the same group of companies filed a lawsuit against us, our former Chairman and CEO Joseph Papa and our former CFO Judy Brown. This lawsuit is not a securities class action. The same law firm that represents the plaintiffs in the *Mason Capital L.P.*, the *Pentwater Equities Opportunities Master Fund Ltd.*, the *WCM*, and the *Hudson Bay Master Fund, Ltd.* cases represents the plaintiffs in this lawsuit. The factual allegations of the complaint are substantially similar to the factual allegations in those four earlier cases. The case is styled *Discovery Global Citizens Master Fund, Ltd., et al. v. Perrigo Co. plc, et al.*, and is filed in the U.S. District Court for the District of New Jersey. The *Discovery Global* case is assigned to the same federal judge that is hearing the *Roofers' Pension Fund* class action case and the twelve other individual cases described above. The complaint asserts claims under Securities Exchange Act section § 14(e) against all defendants and section 20(a) control person claims against the individual defendants. In general, the plaintiffs' allegations describe events during the period from April 2015 through May

2017. Plaintiffs contend that the defendants provided inadequate disclosure during the tender offer period in 2015 and point to disclosures at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset. Many of the factual allegations in this complaint overlap with the allegations of the June 2017 amended complaint in the *Roofer's Pension Fund* case described above. The plaintiffs do not provide an estimate of damages. The parties are conferring about the applicability of the rulings in prior cases described above to this case and a date for defendants to answer the complaint. We intend to defend this case vigorously.

On December 20, 2019, York Capital Management, L.P. and six other related funds from the same group of companies filed a lawsuit against us, our former Chairman and CEO Joseph Papa and our former CFO Judy Brown. This lawsuit is not a securities class action. The same law firm that represents the plaintiffs in the *Mason Capital L.P.*, the *Pentwater Equities Opportunities Master Fund Ltd.*, the *WCM*, the *Hudson Bay Master Fund, Ltd.*, and the *Discovery Global* cases represents the plaintiffs in this lawsuit. The factual allegations of the complaint are substantially similar to the factual allegations in those four earlier cases. The case is styled *York Capital Management, L.P., et al. v. Perrigo Co. plc, et al.*, and is filed in the U.S. District Court for the District of New Jersey. The *York Capital* case is assigned to the same federal judge that is hearing the *Roofer's Pension Fund* class action case and the thirteen other individual cases in described above. The complaint asserts claims under Securities Exchange Act section § 14(e) against all defendants and section 20(a) control person claims against the individual defendants. In general, the plaintiffs' allegations describe events during the period from April 2015 through May 2017. Plaintiffs contend that the defendants provided inadequate disclosure during the tender offer period in 2015 and point to disclosures at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset. Many of the factual allegations in this complaint overlap with the allegations of the June 2017 amended complaint in the *Roofer's Pension Fund* case described above. The plaintiffs do not provide an estimate of damages. The parties are conferring about the applicability of the rulings in prior cases described above to this case and a date for defendants to answer the complaint. We intend to defend this case vigorously.

On February 12, 2020, Burlington Loan Management DAC filed a lawsuit against us, our former Chairman and CEO Joseph Papa and our former CFO Judy Brown. This lawsuit is not a securities class action. The same law firm that represents the plaintiffs in the *Mason Capital L.P.*, the *Pentwater Equities Opportunities Master Fund Ltd.*, the *WCM*, the *Hudson Bay Master Fund, Ltd.*, the *Discovery Global*, and the *York Capital* cases represents the plaintiff in this lawsuit. The factual allegations of the complaint are substantially similar to the factual allegations in those six earlier cases. The case is styled *Burlington Loan Management DAC v. Perrigo Co. plc, et al.*, and is filed in the U.S. District Court for the District of New Jersey. The *Burlington Loan* case is assigned to the same federal judge that is hearing the *Roofer's Pension Fund* class action case and the fourteen other individual cases in described above. The complaint asserts claims under Securities Exchange Act section 14(e) against all defendants and section 20(a) control person claims against the individual defendants. In general, the plaintiff's allegations describe events during the period from April 2015 through May 2017. Plaintiff contends that the defendants provided inadequate disclosure during the tender offer period in 2015 and point to disclosures at various times during the period concerning valuation and integration of Omega, the financial guidance provided by us during that period, alleged price fixing activities with respect to six generic prescription pharmaceuticals, and alleged improper accounting for the Tysabri[®] asset. Many of the factual allegations in this complaint overlap with the allegations of the June 2017 amended complaint in the *Roofer's Pension Fund* case described above. The plaintiff does not provide an estimate of damages. The parties are conferring about the applicability of the rulings in prior cases described above to this case and a date for defendants to answer the complaint. We intend to defend this case vigorously.

In Israel (cases related to events in 2015-2017)

Because our shares are traded on the Tel Aviv exchange under a dual trading arrangement, we are potentially subject to securities litigation in Israel. Three cases were filed; one was voluntarily dismissed in each of 2017 and 2018 and one was stayed in 2018. We are consulting Israeli counsel about our response to these allegations and we intend to defend this case vigorously.

On June 28, 2017, a plaintiff filed a complaint in Tel Aviv District Court styled *Israel Elec. Corp. Employees' Educ. Fund v. Perrigo Company plc, et al.* The lead plaintiff seeks to represent a class of shareholders who

purchased Perrigo stock on the Tel Aviv exchange during the period April 24, 2015 through May 3, 2017 and also a claim for those that owned shares on the final day of the Mylan tender offer (November 13, 2015). The amended complaint names as defendants the Company, Ernst & Young LLP (the Company's auditor), and 11 current or former directors and officers of Perrigo (Meses. Judy Brown, Laurie Brlas, Jacquelyn Fouse, Ellen Hoffing, and Messrs. Joe Papa, Marc Coucke, Gary Cohen, Michael Jandernoa, Gerald Kunkle, Herman Morris, and Donal O'Connor). The complaint alleges violations under U.S. securities laws of Securities Exchange Act sections 10(b) (and Rule 10b-5) and 14(e) against all defendants and 20(a) control person liability against the 11 individuals or, in the alternative, under Israeli securities laws. In general, the allegations concern the actions taken by us and our former executives to defend against the unsolicited takeover bid by Mylan in the period from April 21, 2015 through November 13, 2015 and the allegedly inadequate disclosure concerning purported integration problems related to the Omega acquisition, alleges incorrect reporting of organic growth at the Company, alleges price fixing activities with respect to six generic prescription pharmaceuticals, and alleges improper accounting for the Tysabri[®] royalty stream. The plaintiff indicates an initial, preliminary class damages estimate of 2.7 billion NIS (approximately \$760.0 million at 1 NIS = 0.28 cents). After the other two cases filed in Israel were voluntarily dismissed, the plaintiff in this case agreed to stay this case pending the outcome of the *Roofers' Pension Fund* case in the U.S. (described above). The Israeli court approved the stay, and this case is now stayed. We intend to defend the lawsuit vigorously.

In the United States (cases related to Irish Tax events)

On January 3, 2019, a shareholder filed a complaint against the Company, our CEO Murray Kessler, and our former CFO Ronald Winowiecki in the U.S. District Court for the Southern District of New York (*Masih v. Perrigo Company, et al.*). Plaintiff purports to represent a class of shareholders for the period November 8, 2018 through December 20, 2018, inclusive. The complaint alleges violations of Securities Exchange Act section 10(b) (and Rule 10b-5) against all defendants and section 20(a) control person liability against the individual defendants. In general the allegations contend that the Company, in its Form 10-Q filed November 8, 2018, disclosed information about an October 31, 2018 audit finding letter received from Irish tax authorities but failed to disclose enough material information about that letter until December 20, 2018, when we filed a current report on Form 8-K about Irish tax matters. The plaintiff does not provide an estimate of class damages. The Court selected lead plaintiffs and changed the name of the case to *In re Perrigo Company plc Sec. Litig.* The lead plaintiffs filed an amended complaint on April 12, 2019, which named the same defendants, asserted the same class period, and invoked the same Exchange Act sections. The amended complaint generally repeated the allegations of the original complaint with a few additional details and adds that the defendants also failed to timely disclose the Irish tax authorities' Notice of Amended Assessment received on November 29, 2018. Defendants filed a motion to dismiss on May 3, 2019. On May 31, 2019, the plaintiffs filed a second amended complaint, which asserted a longer class period (March 1, 2018 through December 20, 2018) and added one additional individual defendant, former CEO Uwe Roehrhoff. In general, the second amended complaint contends that Perrigo's disclosures about the Irish tax audit were inadequate beginning with Perrigo's 10-K filed on March 1, 2018 through December 20, 2018 and repeats many of the allegations of the April 2019 amended complaint. The second amended complaint alleges violations of Securities Exchange Act section 10(b) (and SEC Rule 10b-5) against all defendants and section 20(a) control person liability against the three individual defendants. All defendants filed a joint motion to dismiss. On January 23, 2020, the court granted the motion to dismiss in part and denied it in part, dismissing Mr. Roehrhoff as a defendant and dismissing allegations of inadequate disclosures related to the audit by Irish Revenue during the period March 2018 through October 30, 2018. The court permitted the plaintiffs to pursue their claims against us, Mr. Kessler, and Mr. Winowiecki related to disclosures after Perrigo received the October 30, 2018 audit findings letter and later events through December 20, 2018. The Defendants filed answers on February 13, 2020 denying liability, and the Court held a scheduling conference on February 14, 2020. Discovery on the remaining issues has begun. We intend to defend the lawsuit vigorously.

In Israel (cases related to Irish Tax events)

On December 31, 2018, a shareholder filed an action against the Company, our CEO Murray Kessler, and our former CFO Ronald Winowiecki in Tel Aviv District Court (*Baton v. Perrigo Company plc, et. al.*). The case is a securities class action brought in Israel making similar factual allegations for the same period as those asserted in the *In re Perrigo Company plc Sec. Litig* case in New York federal court. This case alleges that persons who invested through the Tel Aviv stock exchange can assert claims under Israeli securities law that will follow the liability principles of Sections 10(b) and 20(a) of the U.S. Securities Exchange Act. The plaintiff does not provide an estimate of class damages. In 2019, the court granted two requests by Perrigo to stay the proceedings. Perrigo filed

a further request for a stay in February 2020, and the court has not yet ruled on that request. We intend to defend the lawsuit vigorously.

Claim Arising from the Omega Acquisition

On December 16, 2016, we and Perrigo Ireland 2 brought an arbitral claim ("Claim") against Alychlo NV ("Alychlo") and Holdco I BE NV (together the "Sellers") in accordance with clause 26.2 of the Share Purchase Agreement dated November 6, 2014 ("SPA") and the rules of the Belgian Centre for Arbitration and Mediation ("CEPANI"). Our Claim relates to the accuracy and completeness of information about Omega provided by the Sellers as part of the sale process, the withholding of information by the Sellers during that process and breaches of Sellers' warranties. We are seeking monetary damages from the Sellers. The Sellers served their respective responses to the Claim on February 20, 2017. In its response, Alychlo has asserted a counterclaim for monetary damages contending that we breached a warranty in the SPA and breached the duty of good faith in performing the SPA. Alychlo subsequently filed papers seeking permission to introduce an additional counterclaim theory of recovery related to the Irish tax issues disclosed by the Company such that if the position of the Irish tax authorities prevails, Alychlo would have further basis for its counterclaim against Perrigo. In June 2019, the Tribunal denied permission for Alychlo to introduce the additional counterclaim and dismissed certain aspects of the original Alychlo counterclaim. There can be no assurance that our Claim will be successful, and the Sellers deny liability for the Claim. To the extent that aspects of Alychlo's counterclaim survived the Tribunal's ruling in June 2019, we deny that Alychlo is entitled to any relief (including monetary relief). The arbitration proceedings are confidential as required by the SPA and the rules of the CEPANI.

Other Matters

Our Board of Directors received a shareholder demand letter dated October 30, 2018 relating to the allegations in the securities cases and price fixing lawsuits described above. The letter demands that the Board of Directors initiate an action against certain current and former executives and Board members to recover damages allegedly caused to the Company. In response, the Company reminded the shareholder that any derivative claim can only proceed in accordance with Irish law, the law that governs the Company's internal affairs. The shareholder responded that he would file a lawsuit asserting derivative claims.

On October 2, 2019, the shareholder filed a derivative action in the U.S. District Court for the District of New Jersey styled *Krueger derivatively on behalf of nominal defendant Perrigo Company plc v. Alford, et al.* The case was assigned to the same judge who is handling the *Roofers' Pension Fund* securities class action and related opt out cases described above. In addition to the Company, the lawsuit names as defendants current Board members Alford, Classon, Karaboutis, Kindler, O'Connor, Parker, and Samuels, current CEO Kessler, former Board members Smith, Brlas, Cohen, Fouse, Hoffing, Jandernoa, Kunkle, and Morris, former CEO Hendrickson, former CEO Papa, former CFO Brown, former CFO Winowiecki, and former Executive Vice Presidents Boothe and Coucke. The lawsuit seeks to authorize the shareholder to pursue claims on behalf of the Company against all the individual defendants for breach of their fiduciary duties and for unjust enrichment, and against the current director defendants, former director Mr. Smith, and current CEO Mr. Kessler for violations of Exchange Act §§ 14(a) (proxy statement disclosures) and 29(b) (disgorgement as a result of alleged violations of § 14(a)). The complaint alleges that the following events indicate that the individuals in their respective capacities failed to exercise appropriate control over the management of the Company and made inadequate public disclosures concerning the integration of Omega after acquisition; the Company's past and prospective organic growth; the defense against the Mylan 2015 tender offer; the alleged collusive pricing activities regarding generic prescription products; the accounting by the Company for the Tysabri® royalty stream; the 2018 Irish tax audit including potential liabilities for Irish taxes; and the April 2019 assertion of tax liabilities by the U.S. Internal Revenue Service (many of these factual events also underlie the securities cases discussed earlier in this Note 17). All defendants have filed motions to dismiss asserting various reasons to dismiss. Plaintiff's oppositions are due in March 2020; defendants' replies in support of dismissal are due in April 2020. We intend to defend the lawsuit vigorously.

NOTE 18 - COLLABORATION AGREEMENTS AND OTHER CONTRACTUAL ARRANGEMENTS

Terms of our various collaboration agreements may require us to make or receive milestone payments upon the achievement of certain product research and development objectives and pay or receive royalties on the future sale, if any, of commercial products resulting from the collaboration. Milestone and up-front payments made are generally recorded in research and development expense if the payments relate to drug candidates that have not yet received regulatory approval. Milestone and up-front payments made related to approved drugs will generally be capitalized and amortized to cost of goods sold over the economic life of the product. Royalties received are generally reflected as revenue, and royalties paid are generally reflected as cost of goods sold. We enter into a number of collaboration agreements in the ordinary course of business. The following is a brief description of notable agreements entered into.

Development Agreements

On May 15, 2015, we entered into a contractual arrangement with a third party that specializes in R&D and obtaining approval for various drug candidates to develop specific products. We entered into additional contractual arrangements in 2016 with the same counterparty. If the products receive FDA approval, we are required to acquire the ANDAs at pre-determined multiples of the associated development costs. If we acquire approved products under these arrangements, we will capitalize these as intangible assets and amortize them over their useful lives. During the three months ended September 29, 2018, we paid \$30.4 million to acquire the ANDA for a generic topical cream. During the three months ended June 29, 2019, we paid \$15.7 million to acquire the ANDA for a generic product used to relieve pain. During the three months ended September 28, 2019, we paid \$49.0 million for a generic gel product (refer to [Note 3](#)). The contractual future purchase obligations for other products in development by the third party as of December 31, 2019 totaled an estimated \$89.0 million. Purchase obligations could be higher or lower than the estimated contractual amounts based on the third party's actual development costs to obtain regulatory approval.

Development-Stage Rx Products

On May 1, 2015, we entered into a development agreement with a clinical stage biotechnology company for the development of two specialty pharmaceutical products. We paid \$18.0 million for an option to acquire the two products, which we reported in R&D expense. On March 1, 2016, we exercised the purchase option to acquire both products, which obligated us to make additional potential milestone payments of up to \$30.0 million in the event of regulatory approval and certain sales milestones. We were also obligated to make royalty payments over periods ranging from seven years to ten years from the launch of each product. On December 20, 2017, we completed the sale of one of the Development-Stage Rx Products (refer to [Note 3](#)), which reduced our potential milestone payment obligations from \$30.0 million to \$17.5 million, plus royalties. On November 30, 2019, we terminated our remaining potential payment obligations by transferring the remaining Development-Stage Rx product back to the clinical stage biotechnology company with which we had the original development agreement.

Generic Injectable Products

In December 2017, we entered into a collaboration agreement with a generic pharmaceutical development company, pursuant to which the parties will collaborate in the ongoing development and commercialization of a generic injectable product. We will provide assistance, including preparing and filing the product ANDA, and be responsible for commercializing the product. As part of the agreement, we paid a \$2.5 million milestone payment on the effective date of the agreement, and we subsequently paid a milestone of \$0.7 million. The milestones paid to date were reported in Research and development on the Consolidated Financial Statements. We will make additional payments if regulatory approval is obtained and certain other development milestones are achieved. As of December 31, 2019, the remaining contingent milestone payments could total \$13.8 million in the aggregate. There can be no assurance that any such products will be approved by the FDA on the anticipated schedule or at all.

Additional future milestone payments and receipts related to agreements not specifically discussed above are not material.

NOTE 19 - RESTRUCTURING CHARGES

We periodically take action to reduce redundant expenses and improve operating efficiencies. Restructuring activity includes severance, lease exit costs, and related consulting fees. The following reflects our restructuring activity (in millions):

Balance at December 31, 2016	\$	19.7
Additional charges		61.0
Payments		(59.6)
Non-cash adjustments		0.3
Balance at December 31, 2017		21.4
Additional charges		21.0
Payments		(18.8)
Non-cash adjustments		0.4
Balance at December 31, 2018		24.0
Additional charges		25.3
Payments		(29.4)
Non-cash adjustments		(0.3)
Balance at December 31, 2019	\$	<u>19.6</u>

The charges incurred during the year ended December 31, 2019, were primarily associated with our strategic transformation initiative and the reorganization of our executive management team. The charges incurred during the years ended December 31, 2018 and December 31, 2017 were primarily associated with actions taken to streamline our organization, as well as lease exit costs.

Of the amount recorded during the year ended December 31, 2019, \$12.2 million related to our CSCI segment, due primarily to the sales force reorganization in France, and \$10.1 million was not allocated to a segment and was primarily related to our strategic transformation initiative and the reorganization of our executive management team. Of the amount recorded during the year ended December 31, 2018, \$17.4 million related to our CSCI segment. Of the amount recorded during the year ended December 31, 2017, \$27.4 million and \$17.1 million related to our CSCA and CSCI segments, respectively. There were no other material restructuring programs in any of the periods presented.

All charges are recorded in Restructuring expense on the Consolidated Financial Statements. The remaining \$19.6 million liability for employee severance benefits is expected to be paid within the next year.

NOTE 20 - SEGMENT AND GEOGRAPHIC INFORMATION

Our segment reporting structure is consistent with the way our management makes operating decisions, allocates resources and manages the growth and profitability of the business (refer to [Note 1](#)).

Below is a summary of our results by reporting segment (in millions):

	CSCA	CSCI	RX	Other ⁽¹⁾	Unallocated	Total
Year Ended December 31, 2019						
Net sales	\$ 2,487.7	\$ 1,382.2	\$ 967.5	\$ —	\$ —	\$ 4,837.4
Operating income (loss)	\$ 414.0	\$ 19.6	\$ 2.6	\$ —	\$ (231.4)	\$ 204.8
Operating margin	16.6%	1.4 %	0.3%	—%	—%	4.2%
Total assets	\$ 3,990.2	\$ 4,682.7	\$ 2,628.5	\$ —	\$ —	\$ 11,301.4
Capital expenditures	\$ 98.4	\$ 18.8	\$ 20.5	\$ —	\$ —	\$ 137.7
Property, plant and equipment, net	\$ 599.8	\$ 149.9	\$ 153.1	\$ —	\$ —	\$ 902.8
Depreciation/amortization	\$ 97.4	\$ 194.3	\$ 104.8	\$ —	\$ —	\$ 396.5
Change in financial assets	\$ —	\$ —	\$ —	\$ —	\$ (22.1)	\$ (22.1)
Year Ended December 31, 2018						
Net sales	\$ 2,411.6	\$ 1,399.3	\$ 920.8	\$ —	\$ —	\$ 4,731.7
Operating income (loss)	\$ 174.4	\$ 6.8	\$ 214.6	\$ —	\$ (159.3)	\$ 236.5
Operating margin	7.2%	0.5 %	23.3%	—%	—%	5.0%
Total assets	\$ 3,571.7	\$ 4,613.0	\$ 2,798.7	\$ —	\$ —	\$ 10,983.4
Capital expenditures	\$ 65.0	\$ 19.1	\$ 18.6	\$ —	\$ —	\$ 102.7
Property, plant and equipment, net	\$ 530.3	\$ 154.8	\$ 144.0	\$ —	\$ —	\$ 829.1
Depreciation/amortization	\$ 104.8	\$ 219.2	\$ 99.6	\$ —	\$ —	\$ 423.6
Change in financial assets	\$ —	\$ —	\$ —	\$ —	\$ (188.7)	\$ (188.7)
Year Ended December 31, 2017						
Net sales	\$ 2,429.9	\$ 1,406.2	\$ 1,054.4	\$ 55.7	\$ —	\$ 4,946.2
Operating income (loss)	\$ 470.9	\$ (2.7)	\$ 306.1	\$ 8.7	\$ (184.8)	\$ 598.2
Operating margin	19.4%	(0.2)%	29.0%	15.6%	—%	12.1%
Total assets	\$ 3,786.8	\$ 4,908.3	\$ 2,933.7	\$ —	\$ —	\$ 11,628.8
Capital expenditures	\$ 39.5	\$ 23.4	\$ 25.7	\$ —	\$ —	\$ 88.6
Property, plant and equipment, net	\$ 512.8	\$ 169.7	\$ 150.6	\$ —	\$ —	\$ 833.1
Depreciation/amortization	\$ 115.2	\$ 219.9	\$ 103.9	\$ 5.8	\$ —	\$ 444.8
Change in financial assets	\$ —	\$ —	\$ —	\$ —	\$ 24.9	\$ 24.9

(1) Includes our former Specialty Sciences segment.

The net book value of Property, plant and equipment, net by location was as follows (in millions):

	Year Ended	
	December 31, 2019	December 31, 2018
U.S.	\$ 614.5	\$ 548.7
Europe ⁽¹⁾	146.8	152.3
Israel	86.1	77.6
All other countries	55.4	50.5
	<u>\$ 902.8</u>	<u>\$ 829.1</u>

(1) Includes Ireland Property, plant and equipment, net of \$9.3 million and \$9.8 million, for the years ended December 31, 2019 and December 31, 2018, respectively.

Sales to Walmart as a percentage of Consolidated Net sales (reported primarily in our CSCA segment) were as follows:

Year Ended		
December 31, 2019	December 31, 2018	December 31, 2017
13.0%	12.8%	13.0%

NOTE 21 - QUARTERLY FINANCIAL DATA (unaudited)

The following table presents unaudited quarterly consolidated operating results for each of our last eight quarters. The information below has been prepared on a basis consistent with our audited consolidated financial statements (in millions, except per share amounts):

	First Quarter ⁽²⁾	Second Quarter ⁽³⁾	Third Quarter ⁽⁴⁾	Fourth Quarter ⁽⁵⁾
Year Ended December 31, 2019				
Net sales	\$ 1,174.5	\$ 1,149.0	\$ 1,191.1	\$ 1,322.8
Gross profit	\$ 448.8	\$ 430.8	\$ 412.8	\$ 480.9
Change in financial assets	\$ (10.4)	\$ (5.5)	\$ (2.6)	\$ (3.6)
Net income (loss)	\$ 63.9	\$ 9.0	\$ 92.2	\$ (19.0)
Earnings (loss) per share ⁽¹⁾ :				
Basic	\$ 0.47	\$ 0.07	\$ 0.68	\$ (0.14)
Diluted	\$ 0.47	\$ 0.07	\$ 0.67	\$ (0.14)
Weighted average shares outstanding:				
Basic	135.9	136.0	136.0	136.1
Diluted	136.2	136.5	136.8	137.0

- (1) The sum of individual per share amounts may not equal due to rounding.
- (2) Includes change in financial assets of \$10.4 million.
- (3) Includes impairment charges of \$27.8 million and restructuring charges and other termination benefits of \$12.2 million.
- (4) Includes animal health divestiture pre-tax gain of \$71.7 million, Ranitidine market withdrawal charges of \$18.4 million, acquisition-related charges and contingent consideration adjustments of \$18.1 million, and impairment charges of \$10.9 million.
- (5) Includes impairment charges of \$141.6 million.

	First Quarter	Second Quarter ⁽²⁾	Third Quarter ⁽³⁾	Fourth Quarter
Year Ended December 31, 2018				
Net sales	\$ 1,217.0	\$ 1,186.4	\$ 1,133.1	\$ 1,195.2
Gross profit	\$ 492.7	\$ 471.0	\$ 424.8	\$ 443.0
Change in financial assets	\$ 9.6	\$ (0.6)	\$ (74.9)	\$ (122.8)
Net income (loss)	\$ 80.8	\$ 36.2	\$ (67.5)	\$ 81.5
Earnings (loss) per share ⁽¹⁾ :				
Basic	\$ 0.57	\$ 0.26	\$ (0.49)	\$ 0.60
Diluted	\$ 0.57	\$ 0.26	\$ (0.49)	\$ 0.60
Weighted average shares outstanding:				
Basic	140.8	138.1	137.4	135.9
Diluted	141.4	138.7	137.4	136.3

- (1) The sum of individual per share amounts may not equal due to rounding.
- (2) Includes acquisition-related charges and contingent consideration adjustments of \$53.2 million.
- (3) Includes impairment charges of \$221.8 million and restructuring charges and other termination benefits of \$18.0 million.

NOTE 22 - SUBSEQUENT EVENTS

Oral Care Acquisitions

Steripod®

On January 3, 2020, we acquired Steripod®, a leading toothbrush accessory brand and innovator in the toothbrush protector market, from Bonfit America Inc. Total consideration paid was \$24.7 million, subject to customary post-closing adjustments. We funded the transaction with cash on hand.

The acquisition, which includes a portfolio of antibacterial toothbrush protectors, kids' toothbrush protectors and tongue cleaners, complements our current portfolio of oral self-care products and leverages our manufacturing and marketing platform. Operating results attributable to the products will be included in our CSCA segment.

High Ridge Brands

On February 20, 2020, we entered into a definitive agreement to acquire the oral care assets of High Ridge Brands for \$113.0 million in cash. The transaction is expected to close in the first quarter of 2020 subject to bankruptcy court approval in connection with High Ridge Brands' Chapter 11 cases, as well as other customary closing conditions.

The acquisition includes the children's oral care value brand, Firefly®, in addition to the REACH® and Dr. Fresh® brands. This transaction, in combination with our existing children's oral self-care portfolio, provides a new platform for disruptive product innovation in the form of exclusive store and value brand programs that challenge current national brand oral care offerings. Operating results attributable to the products will be included in our CSCA segment.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) or 15d-15(e) of the Exchange Act) as of December 31, 2019. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of December 31, 2019. Management concluded that the consolidated financial statements included in this Annual Report present fairly, in all material respects, the financial position of the Company at December 31, 2019 in conformity with GAAP and our external auditors have issued an unqualified opinion on our consolidated financial statements as of and for the year ended December 31, 2019.

(b) Management's Annual Report on Internal Control Over Financial Reporting

MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Perrigo Company plc is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) or 15d-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles and includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of our assets;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

All systems of internal control, no matter how well designed, have inherent limitations. Therefore, even those systems deemed to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Because of inherent limitations, our 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.

We acquired Ranir during the third quarter of 2019 (refer to [Item 8. Note 3](#)). As permitted by Securities and Exchange Commission Staff interpretive guidance for newly acquired businesses, management excluded Ranir from its evaluation of internal control over financial reporting as of December 31, 2019. We are in the process of documenting and testing Ranir's internal controls over financial reporting. We will incorporate Ranir into our annual report on internal control over financial reporting for our year ending December 31, 2020. As of December 31, 2019, assets excluded from management's assessment totaled \$866.4 million. Ranir contributed \$151.4 million of Net sales and \$10.1 million of Operating income in our Consolidated Statements of Operations for the year ended December 31, 2019.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019. The framework used in carrying out our evaluation was the 2013 *Internal Control - Integrated Framework* published by the Committee of Sponsoring Organizations ("COSO") of the Treadway Commission. In evaluating our information technology controls, we also used components of the framework contained in the *Control Objectives for Information and Related Technology*, which was developed by the Information Systems Audit and Control Association's IT Governance Institute, as a complement to the COSO internal control framework. Management has concluded that our internal control over financial reporting was effective as of December 31, 2019. The results of management's assessment have been reviewed with our Audit Committee.

Ernst & Young LLP, the independent registered public accounting firm that audited our financial statements included in this Annual Report on Form 10-K, also audited the effectiveness of our internal control over financial reporting, as stated in their report that is included herein.

ITEM 9B. OTHER INFORMATION

Not applicable.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of Perrigo Company plc

Opinion on Internal Control Over Financial Reporting

We have audited Perrigo Company plc's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Perrigo Company plc (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

As indicated in the accompanying Management's Annual Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Ranir Global Holdings, LLC, which is included in the 2019 consolidated financial statements of the Company and constituted 8% and 13% of total and net assets, respectively, as of December 31, 2019 and 3% and 5% of net sales and net income, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Ranir Global Holdings, LLC.

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 as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and the financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the "consolidated financial statements") and our report dated February 27, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The 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 Management's Annual 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 the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit 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, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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/ Ernst & Young LLP

Grand Rapids, Michigan
February 27, 2020

PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE

- (a) Directors of Perrigo Company plc.

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Election of Directors" or will be included in an amendment to this annual report on Form 10-K.

- (b) Executive Officers of Perrigo Company plc.

See Part I, Additional Item of this Form 10-K under the heading "Information About our Executive Officers."

- (c) Audit Committee Financial Expert.

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Audit Committee" or will be included in an amendment to this annual report on Form 10-K.

- (d) Identification and Composition of the Audit Committee.

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Audit Committee" or will be included in an amendment to this annual report on Form 10-K.

- (e) Compliance with Section 16(a) of the Exchange Act.

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Delinquent Section 16(a) Reports" or will be included in an amendment to this annual report on Form 10-K.

- (f) Code of Ethics.

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Corporate Governance" or will be included in an amendment to this annual report on Form 10-K.

ITEM 11. EXECUTIVE COMPENSATION

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the headings "Executive Compensation", "Remuneration Committee Report", "Potential Payments Upon Termination or Change in Control" and "Director Compensation" or will be included in an amendment to this annual report on Form 10-K.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Ownership of Perrigo Ordinary Shares" or will be included in an amendment to this annual report on Form 10-K. Information concerning equity compensation plans is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Equity Compensation Plan Information" or will be included in an amendment to this annual report on Form 10-K.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Certain Relationships and Related-Party Transactions" and "Corporate Governance" or will be included in an amendment to this annual report on Form 10-K.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

This information is incorporated by reference to our Proxy Statement for the Annual Meeting of Shareholders to be held on May 6, 2020 under the heading "Ratification, in a Non-Binding Advisory Vote, of the Appointment of Ernst & Young LLP as Independent Auditor of the Company and Authorization, in a Binding Vote, of the Board of Directors, Acting Through the Audit Committee, to Fix the Remuneration of the Auditor" or will be included in an amendment to this annual report on Form 10-K.

PART IV.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) The following documents are filed or incorporated by reference as part of this Form 10-K:

1. All financial statements. See Index to Consolidated Financial Statements.

2. Financial Schedules.

Schedule II – Valuation and Qualifying Accounts.

Schedules other than the one listed are omitted because the required information is included in the footnotes, immaterial or not applicable.

3. Exhibits:

- 2.1 Transaction Agreement, dated as of July 28, 2013, among Perrigo Company, Elan Corporation, plc, Perrigo Company plc, Habsont Limited and Leopard Company (incorporated by reference from Annex A to the joint proxy statement/prospectus included in the Company's Registration Statement on Form S-4/A filed on October 8, 2013) (File No. 333-190859).
- 2.2 Part A of Appendix I to Rule 2.5 Announcement (Conditions to the Implementation of the Scheme and the Acquisition) (incorporated by reference from Annex B to the joint proxy statement/prospectus included in the Company's Registration Statement on Form S-4/A filed on October 8, 2013) (File No. 333-190859).
- 2.3⁺ Asset Purchase Agreement, dated as of February 5, 2013, by and among Elan Pharma International Limited, Elan Pharmaceuticals, Inc. and Biogen Idec International Holding Ltd (incorporated by reference from Exhibit 4(c) (31) of Elan Corporation, plc's Annual Report on Form 20-F for the year ended December 31, 2012) (File No. 001-13896).
- 2.4 Agreement for the Sale and Purchase of 685,348,257 Shares Of Omega Pharma Invest N.V., dated as of November 6, 2014, by and among the Company, Alychlo N.V. and Holdco I BE N.V. (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 12, 2014) (File No. 001-36353).
- 2.5 Amendment Agreement dated March 27, 2015 to the Agreement for the Sale and Purchase of 685,348,257 Shares Of Omega Pharma Invest N.V., dated as of November 6, 2014, by and among the Company, Alychlo N.V. and Holdco I BE N.V. (incorporated by reference from Exhibit 2.3 to the Company's Quarterly Report on Form 10-Q filed on April 29, 2015) (File No. 001-36353).
- 2.6 Assignment Letter dated March 17, 2015 regarding the Agreement for the Sale and Purchase of 685,348,257 Shares Of Omega Pharma Invest N.V., dated as of November 6, 2014, by and among the Company, Alychlo N.V. and Holdco I BE N.V. (incorporated by reference from Exhibit 2.1 to the Company's Quarterly Report on Form 10-Q filed on April 29, 2015) (File No. 001-36353).
- 2.7 Closing Letter dated March 17, 2015 regarding the Agreement for the Sale and Purchase of 685,348,257 Shares Of Omega Pharma Invest N.V., dated as of November 6, 2014, by and among the Company, Alychlo N.V. and Holdco I BE N.V. (incorporated by reference from Exhibit 2.2 to the Company's Quarterly Report on Form 10-Q filed on April 29, 2015) (File No. 001-36353).
- 3.1 Certificate of Incorporation of Perrigo Company plc (formerly known as Perrigo Company Limited) (incorporated by reference from Exhibit 4.1 to the Company's Registration Statement on Form S-8 filed December 19, 2013) (File No. 333-192946).
- 3.2 Memorandum and Articles of Association of Perrigo Company plc, as amended and restated (incorporated by reference from Exhibit 3.2 to the Company's Quarterly Report on Form 10-Q filed on August 10, 2017) (File No. 001-36353).
- 4.1 Indenture dated as of November 8, 2013, among the Company, the guarantors named therein and Wells Fargo Bank, N.A., as Trustee (incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 12, 2013) (File No. 333-190859).

- 4.2 First Supplemental Indenture, dated December 18, 2013 to the Indenture dated as of November 8, 2013, among the Company, the guarantors named therein and Wells Fargo Bank, N.A., as Trustee (incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 19, 2013) (File No. 333-190859).
- 4.3 Base Indenture dated as of December 2, 2014, between Perrigo Finance Unlimited Company, formerly known as Perrigo Finance plc, the Company and Wells Fargo Bank, National Association, as trustee (incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 2, 2014) (File No. 001-36353).
- 4.4 First Supplemental Indenture dated as of December 2, 2014, between Perrigo Finance Unlimited Company, formerly known as Perrigo Finance plc, the Company and Wells Fargo Bank, National Association, as trustee (incorporated by reference from Exhibit 4.2 to the Company's Current Report on Form 8-K filed on December 2, 2014) (File No. 001-36353).
- 4.5 Supplemental Indenture No. 2, dated as of March 10, 2016, among Perrigo Finance Unlimited Company, the Company and Wells Fargo Bank, National Association, as trustee (incorporated by reference from Exhibit 4.1 to the Company's Current Report on Form 8-K filed on March 10, 2016) (File No. 001-36353).
- 4.6 Form of 3.500% Senior Notes due 2021 (included as Exhibit A-1 to the First Supplemental Indenture dated as of December 2, 2014, between Perrigo Finance Unlimited Company, formerly known as Perrigo Finance plc, the Company and Wells Fargo Bank, National Association, as trustee) (incorporated by reference from Exhibit 4.2 to the Company's Current Report on Form 8-K filed on December 2, 2014) (File No. 001-36353).
- 4.7 Form of 3.900% Senior Notes due 2024 (included as Exhibit A-2 to the First Supplemental Indenture dated as of December 2, 2014, between Perrigo Finance Unlimited Company, formerly known as Perrigo Finance plc, the Company and Wells Fargo Bank, National Association, as trustee) (incorporated by reference from Exhibit 4.2 to the Company's Current Report on Form 8-K filed on December 2, 2014) (File No. 001-36353).
- 4.8 Form of 4.900% Senior Notes due 2044 (included as Exhibit A-3 to the First Supplemental Indenture dated as of December 2, 2014, between Perrigo Finance Unlimited Company, formerly known as Perrigo Finance plc, the Company and Wells Fargo Bank, National Association, as trustee) (incorporated by reference from Exhibit 4.2 to the Company's Current Report on Form 8-K filed on December 2, 2014) (File No. 001-36353).
- 4.9 Form of Global Note representing the 2021 Notes (included in Exhibit 4.5).
- 4.10 Form of Global Note representing the 2026 Notes (included in Exhibit 4.5).
- 4.11 Prospectus, dated April 23, 2012, in connection with the public offering of Omega Pharma Invest N.V. of EUR 180,000,000 of 4.500% retail bonds due 2017 and EUR 120,000,000 of 5.000% retail bonds due 2019 (incorporated by reference from Exhibit 4.3 to the Company's Current Report on Form 8-K filed on April 3, 2015) (File No. 001-36353).
- 4.12 Description of the Company's Securities (filed herewith).
- 10.1 Senior Unsecured Credit Facilities Commitment Letter by and among the Company, J.P. Morgan Securities LLC, JPMorgan Chase Bank, N.A. and Barclays Bank PLC dated as of November 6, 2014 (incorporated by reference from Exhibit 10.3 to the Company's Current Report on Form 8-K filed on November 12, 2014) (File No. 001-36353).
- 10.2 Revolving Credit Agreement by and among Perrigo Finance Unlimited Company, Perrigo Company plc, JPMorgan Chase Bank, N.A., and the other lenders party thereto, dated as of March 8, 2018 (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 9, 2018).
- 10.3 Amendment No. 1, by and among Perrigo Finance Unlimited Company, Perrigo Company plc, JPMorgan Chase Bank, N.A., and the other lenders party thereto, dated as of August 15, 2019 (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K filed on August 16, 2019).
- 10.4 Term Loan Credit Agreement by and among Perrigo Finance Unlimited Company, Perrigo Company plc, JPMorgan Chase Bank, N.A., and the other lenders party thereto, dated as of August 15, 2019 (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 16, 2019).

- 10.5 Purchase and Sale Agreement by and among Perrigo Pharma International Designated Activity Company, Perrigo Company plc and RPI Finance Trust, dated February 27, 2017 (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 28, 2017) (File No. 001-36353).
- 10.6 Stock Purchase Agreement and Agreement and Plan of Merger by and among Perrigo Oral Health Care Holdings, Inc., Perrigo Ireland 6 DAC, Big Mouth Merger Sub, LLC, Ranir Global Holdings, LLC, Camden Partners III SPV, L.P., RGH SELLER REP, LLC and Perrigo Company plc, effective as of May 8, 2019 (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2019).
- 10.7* Perrigo Annual Incentive Plan, as amended and restated effective February 13, 2019 (incorporated by reference from Exhibit 10.5 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.8* 2008 Long-Term Incentive Plan, adopted November 4, 2008 (incorporated by reference from Exhibit 10(b) to Perrigo Company's Quarterly Report on Form 10-Q filed on February 3, 2009) (File No. 000-19725).
- 10.9* 2013 Long-Term Incentive Plan (incorporated by reference from Annex J to the Company's Registration Statement on Form S-4/A filed on October 8, 2013) (File No. 333-190859).
- 10.10* Amendment No. 1 to the 2013 Long-Term Incentive Plan, dated as of January 29, 2014 (incorporated by reference from Exhibit 10.12 to the Company's Quarterly Report on Form 10-Q filed on February 6, 2014) (File No. 333-190859).
- 10.11* Amendment No. 2 to the 2013 Long-Term Incentive Plan, effective as of July 9, 2015 (incorporated by reference from Exhibit 10.17 to the Company's Annual Report on Form 10-K, filed on August 13, 2015) (File No. 001-36353).
- 10.12* Amendment No. 3 to the 2013 Long-Term Incentive Plan, effective as of November 3, 2017 (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 9, 2017) (File No. 001-36353).
- 10.13* Amendment No. 4 to the 2013 Long-Term Incentive Plan, effective as of February 13, 2019 (incorporated by reference from Exhibit 10.11 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.14* Perrigo Company plc 2019 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on April 30, 2019).
- 10.15* Nonqualified Deferred Compensation Plan, as amended as of October 10, 2007 and effective January 1, 2007 (incorporated by reference from Exhibit 10.1 to Perrigo Company's Current Report on Form 8-K filed on October 11, 2007) (File No. 000-19725).
- 10.16* Amendment One to the Nonqualified Deferred Compensation Plan, dated December 3, 2009 (incorporated by reference from Exhibit 10.14 to the Company's Annual Report on Form 10-K filed on August 14, 2014) (File No. 001-36353).
- 10.17* Amendment Two to the Nonqualified Deferred Compensation Plan, dated as of October 10, 2012, (incorporated by reference from Exhibit 10.1 to Perrigo Company's Quarterly Report on Form 10-Q filed on February 1, 2013) (File No. 000-19725).
- 10.18* Amendment Three to the Nonqualified Deferred Compensation Plan, dated as of November 13, 2013 (incorporated by reference from Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q filed on February 6, 2014) (File No. 333-190859).
- 10.19* Amendment Four to the Nonqualified Deferred Compensation Plan, dated as of January 31, 2014 (incorporated by reference from Exhibit 10.13 to the Company's Quarterly Report on Form 10-Q filed on February 6, 2014) (File No. 333-190859).
- 10.20* Amendment Five to the Nonqualified Deferred Compensation Plan, dated as of August 17, 2015 (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 2, 2015) (File No. 001-36353).
- 10.21* Amendment Six to the Perrigo Company Nonqualified Deferred Compensation Plan, dated as of July 23, 2018 (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2018) (File No. 001-36353).
- 10.22* Perrigo Company Employee Severance Programme - Ireland, effective December 18, 2016 (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on August 10, 2017) (File No. 001-36353).

- 10.23* Perrigo Company plc Executive Committee Severance Policy, as amended and restated effective February 13, 2019 (incorporated by reference from Exhibit 10.20 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.24* Perrigo Company plc Change in Control Severance Policy for U.S. Employees, as amended and restated effective February 13, 2019 (incorporated by reference from Exhibit 10.21 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.25* Perrigo Company plc U.S. Severance Policy, as amended and restated effective February 13, 2019 (incorporated by reference from Exhibit 10.22 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.26* Forms of Non-Qualified Stock Option Agreement pursuant to Perrigo Company's 2008 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.49 to Perrigo Company's Annual Report on Form 10-K filed on August 18, 2009) (File No. 000-19725).
- 10.27* Forms of Non-Qualified Stock Option Agreement pursuant to Perrigo Company's 2008 Long-Term Incentive Plan (incorporated by reference from Exhibit 10(c) to Perrigo Company's Quarterly Report on Form 10-Q filed on February 3, 2009) (File No. 000-19725).
- 10.28* Form of Long-Term Incentive Award Agreement under Perrigo Company's 2003 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.1 to Perrigo Company's Current Report on Form 8-K filed on August 22, 2006) (File No. 000-19725).
- 10.29* Form of Long-Term Incentive Award Agreement under Perrigo Company's 2003 Long-Term Incentive Plan (incorporated by reference from Exhibit 10(a) to Perrigo Company's Quarterly Report on Form 10-Q filed on February 1, 2007) (File No. 000-19725).
- 10.30* Form of 2006 Long-Term Incentive Award Agreement, for Approved Section 102 Awards under Perrigo Company's 2003 Long-Term Incentive Plan (incorporated by reference from Exhibit 10(f) to Perrigo Company's Quarterly Report on Form 10-Q filed on May 8, 2007) (File No. 000-19725).
- 10.31* Form of 2006 Long-Term Incentive Award Agreement under Perrigo Company's 2003 Long-Term Incentive Plan (incorporated by reference from Exhibit 10(g) to Perrigo Company's Quarterly Report on Form 10-Q filed on May 8, 2007) (File No. 000-19725).
- 10.32* Forms of Restricted Stock Unit Award Agreement pursuant to Perrigo Company's 2008 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.50 to Perrigo Company's Annual Report on Form 10-K filed on August 18, 2009) (File No. 000-19725).
- 10.33* Forms of Restricted Stock Unit Award Agreement pursuant to Perrigo Company's 2008 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.52 to Perrigo Company's Annual Report on Form 10-K filed on August 16, 2011) (File No. 000-19725).
- 10.34* Forms of Grant Agreement under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.11 to the Company's Quarterly Report on Form 10-Q filed on February 6, 2014) (File No. 333-190859).
- 10.35* Forms of Restricted Stock Unit Award Agreement (Service-Based) under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 99.1 to the Company's Current Report on Form 8-K filed on November 12, 2014) (File No. 001-36353).
- 10.36* Forms of Service-Based and Performance-Based Restricted Stock Unit Award Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 99.1 to the Company's Current Report on Form 8-K filed on June 22, 2015) (File No. 001-36353).
- 10.37* Forms of Amendments to Performance-Based Restricted Stock Unit Award Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 99.1 to the Company's Current Report on Form 8-K filed on June 26, 2015) (File No. 001-36353).
- 10.38* Forms of Service-Based and Performance-Based Restricted Stock Unit Award Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 99.1 to the Company's Current Report on Form 8-K filed on August 12, 2015) (File No. 001-36353).
- 10.39* Form of Performance-Based Restricted Stock Unit Award Agreement for Non-U.S. Participants under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on November 2, 2015) (File No. 001-36353).
- 10.40* Forms of Amendments to Performance-Based Restricted Stock Unit Award Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Current Report on Form 8-K filed on November 13, 2015) (File No. 001-36353).

- 10.41* Forms of Service-Based Restricted Stock Unit Award Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.41 to the Company's Transition Report on Form 10-KT filed on February 25, 2016) (File No. 001-36353).
- 10.42* Forms of Amendment to Service-Based Restricted Stock Unit Award Agreements under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q filed on August 10, 2017) (File No. 001-36353).
- 10.43* Forms of Amendment to Performance-Based Restricted Stock Unit Award Agreements under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q filed on August 10, 2017) (File No. 001-36353).
- 10.44* Forms of Amendment to Nonqualified Stock Option Agreements under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.8 to the Company's Quarterly Report on Form 10-Q filed on August 10, 2017) (File No. 001-36353).
- 10.45* Forms of Service-Based Restricted Stock Unit Award Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q filed on November 9, 2017) (File No. 001-36353).
- 10.46* Forms of Performance-Based Restricted Stock Unit Award Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on November 9, 2017) (File No. 001-36353).
- 10.47* Forms of Nonqualified Stock Option Agreements under the Company's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q filed on November 9, 2017) (File No. 001-36353).
- 10.48* Forms of Service-Based Restricted Stock Unit Award Agreements under the Company's Long-Term Incentive Plan (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K filed on January 8, 2018) (File No. 001-36353).
- 10.49* Forms of Service-Based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from exhibit 10.61 to the Company's Annual Report on Form 10-K filed on March 1, 2018) (File No. 001-36353).
- 10.50* Forms of Performance-Based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from exhibit 10.62 to the Company's Annual Report on Form 10-K filed on March 1, 2018) (File No. 001-36353).
- 10.51* Form of Nonqualified Stock Option Agreement under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from exhibit 10.63 to the Company's Annual Report on Form 10-K filed on March 1, 2018) (File No. 001-36353).
- 10.52* Form of Nonqualified Stock Option Agreement under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.49 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.53* Form of Service-based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.50 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.54* Forms of Performance-based Restricted Stock Unit Award Agreements under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.51 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.55* Form of Perrigo Company plc Director Indemnity Agreement (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on December 19, 2013) (File No. 333-190859).
- 10.56* Form of Perrigo Company plc Officer Indemnity Agreement (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 19, 2013) (File No. 333-190859).
- 10.57* Form of Perrigo Company Indemnity Agreement (incorporated by reference from Exhibit 10.3 to the Company's Current Report on Form 8-K filed on December 19, 2013) (File No. 333-190859).

- 10.58* Form of Nonqualified Stock Option Agreement under Perrigo Company plc's 2019 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.2 to the Company's Current Report on Form 8-K filed on April 30, 2019).
- 10.59* Form of Service-based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2019 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.3 to the Company's Current Report on Form 8-K filed on April 30, 2019).
- 10.60* Forms of Performance-based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2019 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.4 to the Company's Current Report on Form 8-K filed on April 30, 2019).
- 10.61* Form of Nonqualified Stock Option Agreement under Perrigo Company plc's 2019 Long-Term Incentive Plan (filed herewith).
- 10.62* Forms of Performance-based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2019 Long-Term Incentive Plan (filed herewith).
- 10.63* Form of Service-based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2019 Long-Term Incentive Plan (filed herewith).
- 10.64* Amendment No.1 to Employment Agreement, effective as of June 5, 2017, made by and among Perrigo Company plc, Perrigo Management Company and John T. Hendrickson (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on June 5, 2017) (File No. 001-36353).
- 10.65* Letter Agreement between Perrigo Company plc and Ronald L. Winowiecki, dated July 18, 2017 (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 21, 2017) (File No. 001-36353).
- 10.66* Waiver and Release Agreement by and between Perrigo Company plc and Ronald Winowiecki effective as of April 17, 2019 (incorporated by reference from Exhibit 10.9 to the Company's Quarterly Report on Form 10-Q filed on May 9, 2019).
- 10.67* Supplemental Waiver and Release Agreement by and between Perrigo Company plc and Ronald Winowiecki effective as of July 1, 2019 (incorporated by reference from Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q filed on August 8, 2019).
- 10.68* Employment Agreement, effective as of January 15, 2018, by and between Perrigo Pharma International DAC and Uwe Roehrhoff (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on January 8, 2018) (File No. 001-36353).
- 10.69* Amendment No. 1 to Employment Agreement, effective as of January 26, 2018, by and between Perrigo Pharma International DAC Company and Uwe Roehrhoff (incorporated by reference from exhibit 10.68 to the Company's Annual Report on Form 10-K filed on March 1, 2018) (File No. 001-36353).
- 10.70* Employment Agreement, dated as of May 7, 2018, by and between Perrigo Management Company and Uwe Roehrhoff (incorporated by reference from Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed on May 8, 2018) (File No. 001-36353).
- 10.71* Separation Agreement and General Release, effective as of October 8, 2018, by and between Perrigo Management Company and Uwe F. Roehrhoff (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on November 8, 2018) (File No. 001-36353).
- 10.72* Management Agreement, effective as of February 20, 2017, by and between Omega Pharma International NV and Svend Andersen (incorporated by reference from exhibit 10.69 to the Company's Annual Report on Form 10-K filed on March 1, 2018) (File No. 001-36353).
- 10.73* Employment Agreement, effective as of October 8, 2018, by and between Perrigo Management Company and Murray S. Kessler (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on October 9, 2018) (File No. 001-36353).
- 10.74* Amendment No. 1 to Employment Agreement, effective as of February 13, 2019, by and between Perrigo Management Company and Murray S. Kessler (incorporated by reference from Exhibit 10.63 to the Company's Annual Report on Form 10-K filed on February 27, 2019).

- 10.75* Form of Nonqualified Stock Option Agreement under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.64 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.76* Form of Service-based Restricted Stock Unit Award Agreement under Perrigo Company plc's 2013 Long-Term Incentive Plan (incorporated by reference from Exhibit 10.65 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.77* Forms of Performance-based Restricted Stock Unit Award Agreements under Perrigo Company plc's 2013 Long-Term Incentive Plan incorporated by reference from Exhibit 10.66 to the Company's Annual Report on Form 10-K filed on February 27, 2019).
- 10.78* Letter Agreement between the Company and Raymond Silcock, dated March 17, 2019 (incorporated by reference from Exhibit 10.1 to the Company's Current Report on Form 8-K filed on March 20, 2019).
- 10.79* Amendment Agreement dated as of June 11, 2018 to the Stock Escrow Agreement, dated March 30, 2015, by and among Alychlo NV, Perrigo Company plc, Perrigo Ireland 2 Limited, Computershare Inc., and Computershare Trust Company, N.A. (incorporated by reference from Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q filed on August 9, 2018) (File No. 001-36353).
- 10.80* Management Agreement, effective as of January 1, 2020 by and between Perrigo Holding NV and Svend Andersen (filed herewith).
- 10.81* Termination Agreement, effective December 31, 2019, by and between Svend Andersen and Wrafton Laboratories Limited, (filed herewith).
- 10.82* Perrigo Company Employee Severance Programme - Ireland, effective December 19, 2019 (filed herewith).
- 21 Subsidiaries of the Registrant.
- 23 Consent of Ernst & Young LLP.
- 24 Power of Attorney (see signature page).
- 31 Rule 13a-14(a) Certifications.
- 32 Section 1350 Certifications.
- 101.INS Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
- 101.SCH Inline XBRL Taxonomy Extension Schema Document.
- 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document.
- 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document.
- 101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document.
- 101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document.
- 104 Cover Page Interactive Data File, formatted in Inline XBRL (contained in Exhibit 101.INS).

+ Confidential treatment has been requested for portions of this agreement. A completed copy of the agreement, including the redacted portions, has been filed separately with the SEC.

* Denotes management contract or compensatory plan or arrangement.

(b) Exhibits.

The response to this portion of Item 15 is submitted as a separate section of this Report. See Item 15(a)(3) above.

(c) Financial Statement Schedules.

The response to this portion of Item 15 is submitted as a separate section of this Report. See Item 15(a)(2) above.

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS

PERRIGO COMPANY PLC
(in millions)

	Year Ended		
	December 31, 2019	December 31, 2018	December 31, 2017
Allowance for doubtful accounts			
Balance at beginning of period	\$ 6.4	\$ 6.2	\$ 6.3
Net bad debt expenses ⁽¹⁾	0.8	—	1.4
Additions/(deductions) ⁽²⁾	(0.5)	0.2	(1.5)
Balance at end of period	<u>\$ 6.7</u>	<u>\$ 6.4</u>	<u>\$ 6.2</u>

(1) Includes effects of changes in foreign exchange rates.

(2) Uncollectible accounts written off, net of recoveries. Also includes effects of changes in foreign exchange rates.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K for the year ended December 31, 2019 to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Dublin, Ireland on February 27, 2020.

PERRIGO COMPANY PLC

By: /s/ Murray S. Kessler

Murray S. Kessler

Chief Executive Officer and President

(Principal Executive Officer)

POWER OF ATTORNEY

Each person whose signature appears below hereby appoints Murray S. Kessler, Raymond P. Silcock, and Todd W. Kingma and each of them severally, acting alone and without the other, his true and lawful attorney-in-fact with authority to execute in the name of each such person, and to file with the Securities and Exchange Commission, together with any exhibits thereto and other documents therewith, any and all amendments to this Annual Report on Form 10-K for the year ended December 31, 2019 necessary or advisable to enable Perrigo Company plc to comply with the Securities Exchange Act of 1934, or any rules, regulations and requirements of the Securities and Exchange Commission in respect thereof, which amendments may make such other changes in the report as the aforesaid attorney-in-fact executing the same deems appropriate.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K for the year ended December 31, 2019 has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on February 27, 2020.

<u>Signature</u>	<u>Title</u>
<u>/s/ Murray S. Kessler</u> Murray S. Kessler	President and Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ Raymond P. Silcock</u> Raymond P. Silcock	Chief Financial Officer (Principal Accounting and Financial Officer)
<u>/s/ Rolf A. Classon</u> Rolf A. Classon	Chairman of the Board
<u>/s/ Erica L. Mann</u> Erica L. Mann	Director
<u>/s/ Bradley A. Alford</u> Bradley A. Alford	Director
<u>/s/ Adriana Karaboutis</u> Adriana Karaboutis	Director
<u>/s/ Jeffrey B. Kindler</u> Jeffrey B. Kindler	Director
<u>/s/ Donal O'Connor</u> Donal O'Connor	Director
<u>/s/ Geoffrey M. Parker</u> Geoffrey M. Parker	Director
<u>/s/ Theodore R. Samuels</u> Theodore R. Samuels	Director

FINANCIAL INFORMATION

Perrigo Company plc

Reconciliation of Non-GAAP Measures

TABLE I (in millions) (unaudited)

	Twelve Months Ended		Total Change	FX Change	Constant Currency Change
	December 31, 2019	December 31, 2018			
Net sales					
Consolidated	\$ 4,837.4	\$ 4,731.7			
Plus: Ranitidine market withdrawal*	9.2	—			
Less: animal health	(43.7)	(93.9)			
Less: infant foods	(6.1)	(34.1)			
Consolidated net sales as so adjusted	\$ 4,796.8	\$ 4,603.7	4.2%	1.9%	6.1%
Less: Ranir	(151.4)	—			
Organic Consolidated net sales as so adjusted	\$ 4,645.4	\$ 4,603.7	0.9%	1.9%	2.8%

*Ranitidine market withdrawal includes reversal of recorded returns and inventory write-downs.

Perrigo®

Quality, Affordable **Self-Care** Products™