



*We invent for  
a more hopeful tomorrow.*

## **4Q & FULL-YEAR 2018 EARNINGS CALL**

February 2019



# We are an innovative, global healthcare leader, committed to improving health and well-being around the world.

## Forward-Looking Statement

This presentation of Merck & Co., Inc., Kenilworth, N.J., USA (the “Company”) includes “forward-looking statements” within the meaning of the safe harbor provisions of the U.S. Private Securities Litigation Reform Act of 1995. These statements are based upon the current beliefs and expectations of the Company’s management and are subject to significant risks and uncertainties. There can be no guarantees with respect to pipeline products that the products will receive the necessary regulatory approvals or that they will prove to be commercially successful. If underlying assumptions prove inaccurate or risks or uncertainties materialize, actual results may differ materially from those set forth in the forward-looking statements.

Risks and uncertainties include but are not limited to, general industry conditions and competition; general economic factors, including interest rate and currency exchange rate fluctuations; the impact of pharmaceutical industry regulation and health care legislation in the United States and internationally; global trends toward health care cost containment; technological advances, new products and patents attained by competitors; challenges inherent in new product development, including obtaining regulatory approval; the Company’s ability to accurately predict future market conditions; manufacturing difficulties or delays; financial instability of international economies and sovereign risk; dependence on the effectiveness of the Company’s patents and other protections for innovative products; and the exposure to litigation, including patent litigation, and/or regulatory actions.

The Company undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future events or otherwise. Additional factors that could cause results to differ materially from those described in the forward-looking statements can be found in the Company’s 2017 Annual Report on Form 10-K and the Company’s other filings with the Securities and Exchange Commission (SEC) available at the SEC’s Internet site ([www.sec.gov](http://www.sec.gov)).

# STRATEGY IN ACTION

Merck is well-positioned for growth and value creation by addressing unmet medical needs, delivering innovations and returning capital to shareholders



## Mission

To discover, develop and provide innovative products and services that save and improve lives around the world



**REINVENT DISCOVERY  
RESEARCH AND ADVANCE  
THE PIPELINE**

## Vision

Committed to being the premier, research-intensive biopharmaceutical company



**CREATE VALUE FOR  
SHAREHOLDERS AND  
PATIENTS**

## Execution

Proven strategy to deliver growth and create long-term sustainable shareholder value



**DELIVER TOP AND  
BOTTOM LINE GROWTH**

CONSISTENT STRATEGY TO CREATE VALUE FOR PATIENTS AND SHAREHOLDERS

# SIGNIFICANT ACHIEVEMENTS IN 2018 ...



- ✓ Generated meaningful growth in sales and earnings
- ✓ Cemented leadership in immuno-oncology
- ✓ Advanced pipeline of innovative therapies
- ✓ Invested for future growth behind R&D pipeline and in manufacturing capacity
- ✓ Executed value-enhancing business development
- ✓ Delivered robust capital return to shareholders through increased dividend and share repurchases

## ... REINFORCE CONFIDENCE IN OUR LONG-TERM OUTLOOK

- Driving revenue growth through a proven strategy
- Investing in innovation including early discovery research and business development
- Disciplined operational execution and efficient capital allocation

# 2018 PIPELINE HIGHLIGHTS

## REMARKABLE PROGRESS TOWARD BRINGING INNOVATIONS TO PEOPLE ACROSS THE GLOBE



- **ONCOLOGY:**

- 6 new KEYTRUDA indications approved in the U.S.: 1L NSQ NSCLC, 1L SQ NSCLC, 2L Hepatocellular, 3L Cervical, 1L+ Merkel Cell and PMBCL
- 5 new KEYTRUDA indications approved in Japan
- 3 new KEYTRUDA approvals in the EU: 1L NSCLC, Adjuvant Melanoma and 2L H&N
- 2 new Lynparza approvals in the U.S.: gBRCAm 1L Ovarian and 2L Breast
- Lenvima approvals in Hepatocellular Carcinoma in Japan, U.S., EU and China

- **VACCINES:**

- FDA approved GARDASIL 9 in males and females ages 27-45
- Initiated 8 Phase 3 V114 trials
- Collaboration with Instituto Butantan to develop vaccine against dengue infections
- Rolling submission to FDA for Ebola vaccine (V920)

- **OTHER:**

- PIFELTRO / DELSTRIGO approvals in the U.S. and Europe
- Antimicrobial agents: Encouraging new data read-outs for ZERBAXA and relebactam

- **CHINA:**

- 9 new product approvals: GARDASIL 9, BRIDION, KEYTRUDA in melanoma, Lynparza, Lenvima, ISENTRESS GFS, ROTATEQ, ZEPATIER and NOXAFIL



# FINANCIAL HIGHLIGHTS

# FINANCIAL SUMMARY – 4<sup>TH</sup> QUARTER

**DELIVERED 8 PERCENT REVENUE GROWTH AND 11 PERCENT NON-GAAP EPS GROWTH IN Q4 2018 (EX-FX)**

\$ in millions, except EPS amounts

	Q4 2018	Q4 2017	Change	Change Ex-Exchange
Sales	<b>\$10,998</b>	\$10,433	5%	8%
GAAP net income (loss) <sup>1</sup>	<b>1,827</b>	(1,046)	> 100%	> 100%
Non-GAAP net income that excludes certain items <sup>1,2</sup>	<b>2,745</b>	2,665	3%	7%
GAAP EPS	<b>0.69</b>	(0.39)	> 100%	> 100%
Non-GAAP EPS that excludes certain items <sup>2</sup>	<b>1.04</b>	0.98	6%	11%

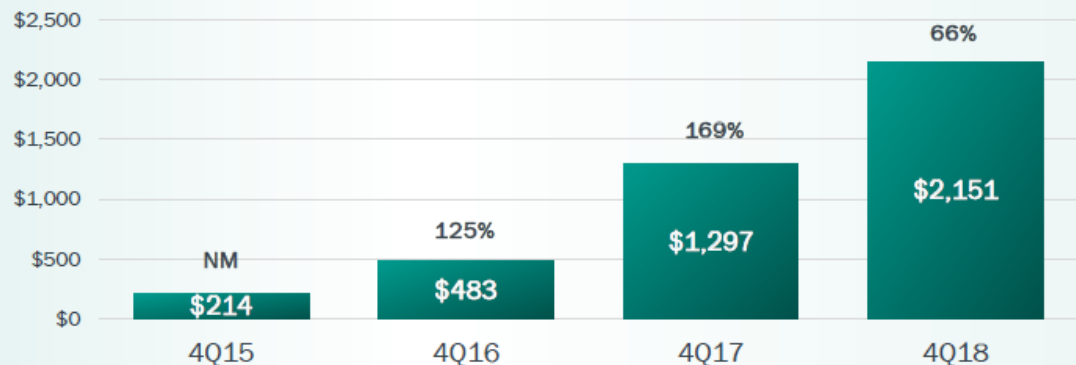
1. Net income (loss) attributable to Merck & Co., Inc.

2. Merck is providing certain 2018 and 2017 non-GAAP information that excludes certain items because of the nature of these items and the impact they have on the analysis of underlying business performance and trends. Management believes that providing this information enhances investors' understanding of the company's results as it permits investors to understand how management assesses performance. Management uses these measures internally for planning and forecasting purposes and to measure the performance of the company along with other metrics. Senior management's annual compensation is derived in part using non-GAAP income and non-GAAP EPS. This information should be considered in addition to, but not as a substitute for or superior to, information prepared in accordance with GAAP. For a description of the items, see Table 2a of the company's Q4 2018 earnings press release.

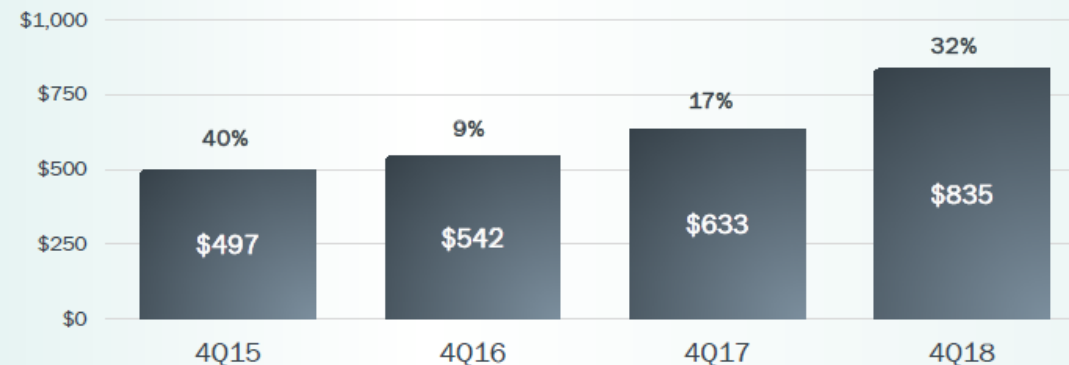
# KEY GROWTH DRIVERS - QUARTERLY

WORLDWIDE QUARTERLY MOMENTUM ACROSS BEST-IN-CLASS PRODUCTS AND PILLARS

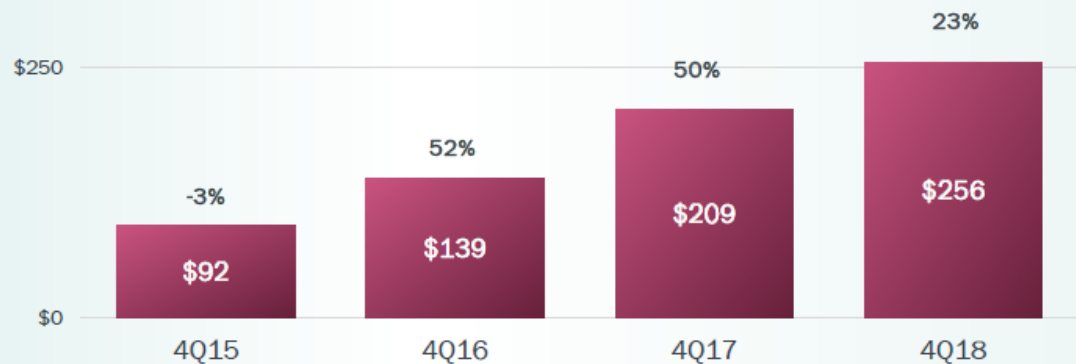
## KEYTRUDA



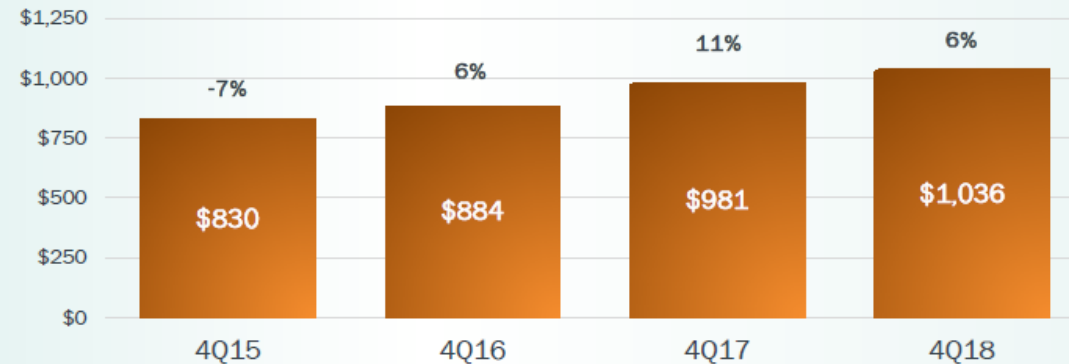
## GARDASIL



## BRIDION



## ANIMAL HEALTH



# FINANCIAL SUMMARY – FULL YEAR

**DELIVERED 5 PERCENT REVENUE GROWTH AND 11 PERCENT NON-GAAP EPS GROWTH IN 2018 (EX-FX)**

\$ in millions, except EPS amounts

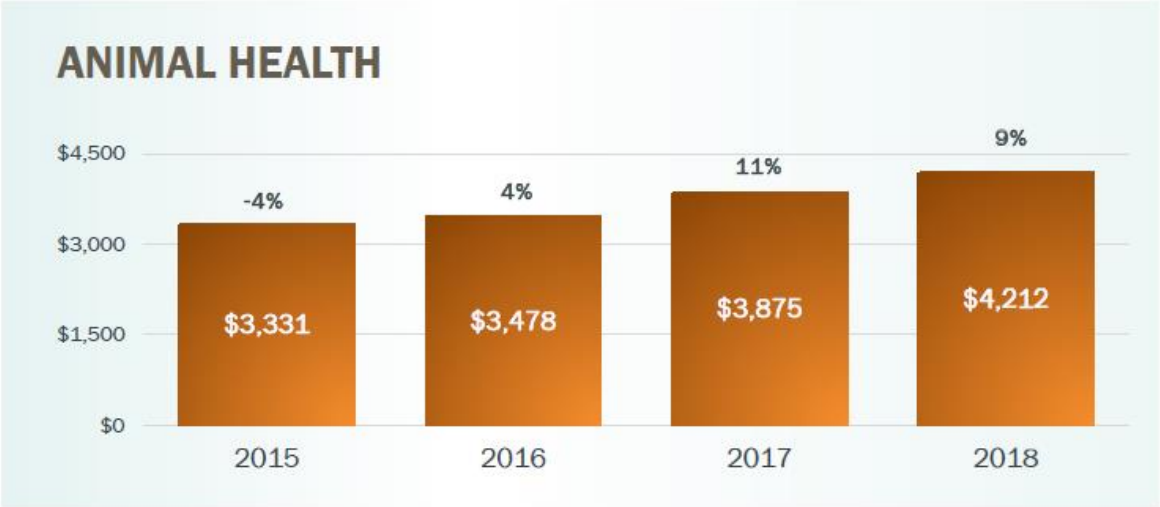
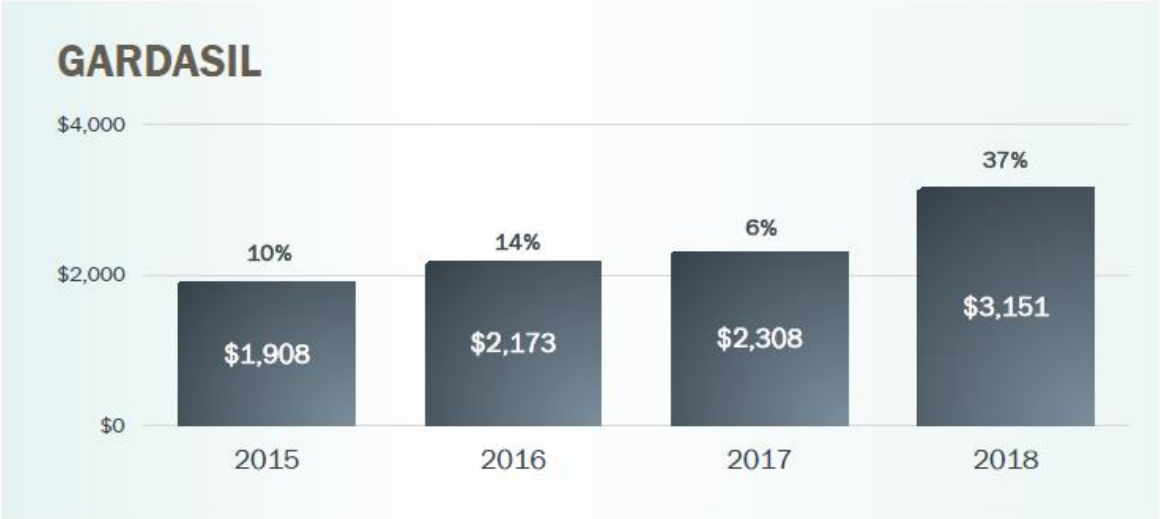
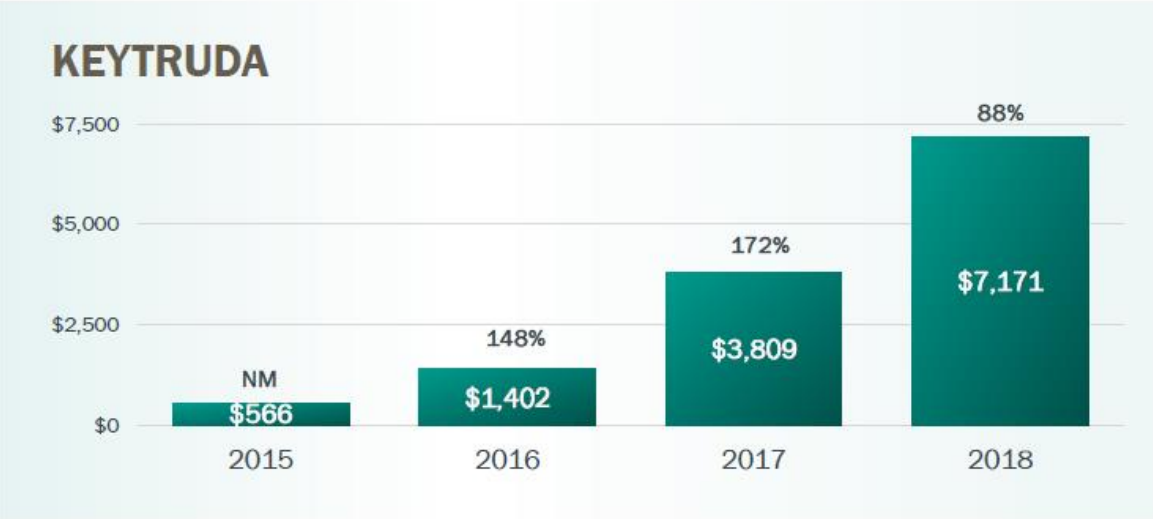
	2018	2017	Change	Change Ex-Exchange
Sales	<b>\$42,294</b>	\$40,122	5%	5%
GAAP net income <sup>1</sup>	<b>6,220</b>	2,394	> 100%	> 100%
Non-GAAP net income that excludes certain items <sup>1,2</sup>	<b>11,621</b>	10,933	6%	8%
GAAP EPS	<b>2.32</b>	0.87	> 100%	> 100%
Non-GAAP EPS that excludes certain items <sup>2</sup>	<b>4.34</b>	3.98	9%	11%

1. Net income attributable to Merck & Co., Inc.

2. Merck is providing certain 2018 and 2017 non-GAAP information that excludes certain items because of the nature of these items and the impact they have on the analysis of underlying business performance and trends. Management believes that providing this information enhances investors' understanding of the company's results as it permits investors to understand how management assesses performance. Management uses these measures internally for planning and forecasting purposes and to measure the performance of the company along with other metrics. Senior management's annual compensation is derived in part using non-GAAP income and non-GAAP EPS. This information should be considered in addition to, but not as a substitute for or superior to, information prepared in accordance with GAAP. See Table 2b of the company's Q4 2018 earnings press release for a reconciliation of the GAAP to non-GAAP amounts.

# KEY GROWTH DRIVERS - ANNUAL

DRIVING STRONG MOMENTUM OVER PAST FOUR YEARS



\$ in millions; NM = not meaningful; as reported

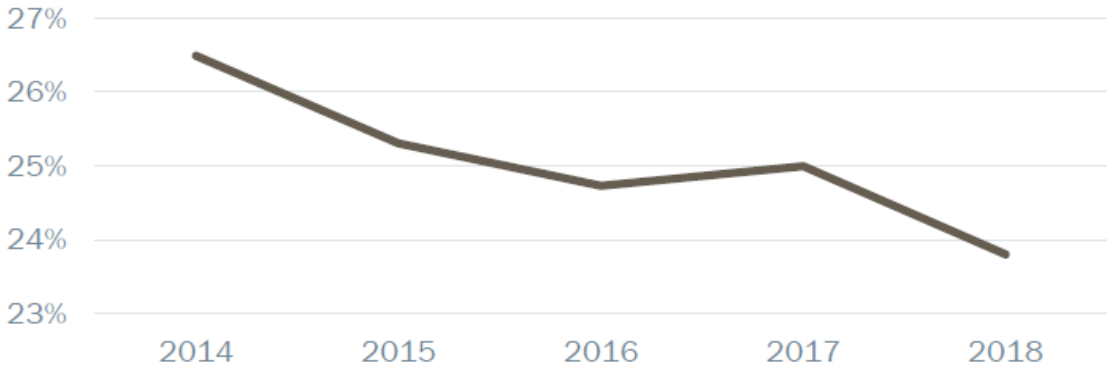
# INVESTING IN THE BUSINESS

WHILE DRIVING TOP AND BOTTOM LINE GROWTH



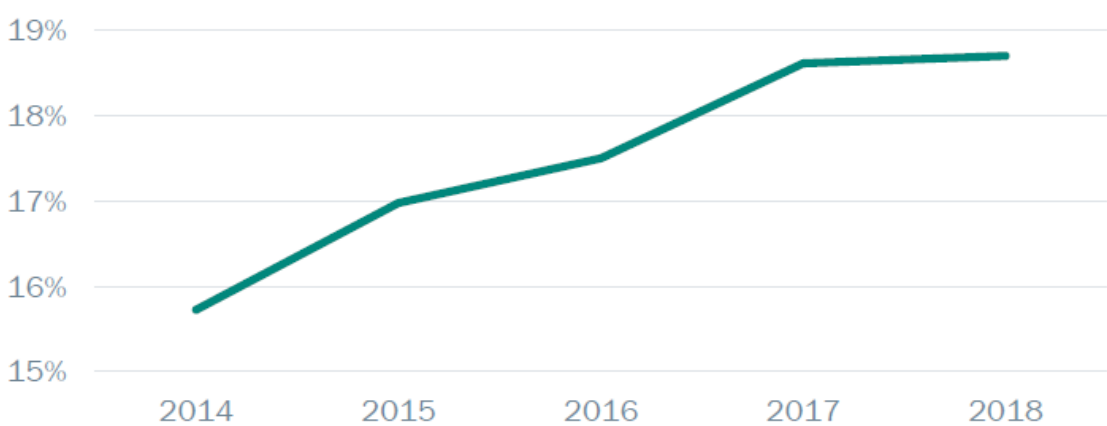
## SG&A

Non-GAAP SG&A as % of Sales



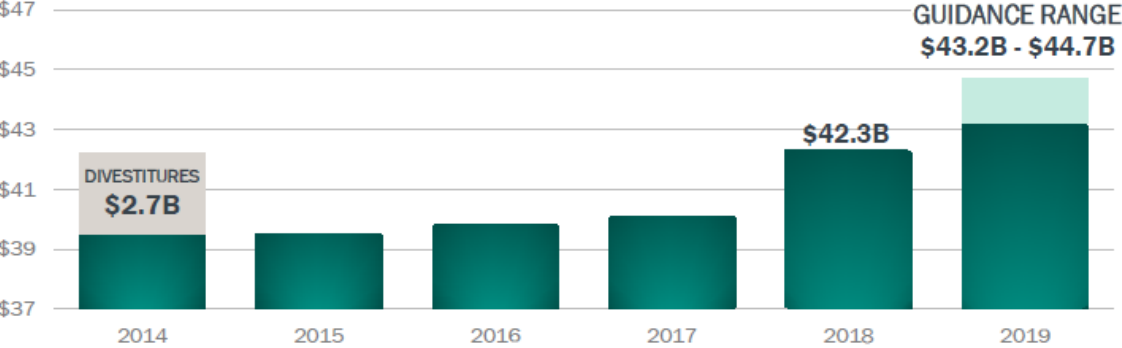
## R&D

Non-GAAP R&D as % of Sales



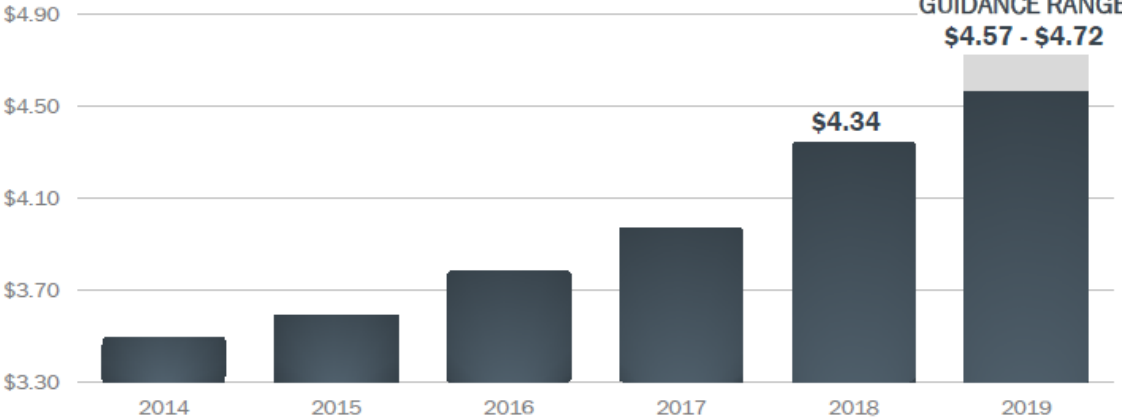
## REVENUE

Billions



## Non-GAAP EPS

Dollars Per Share



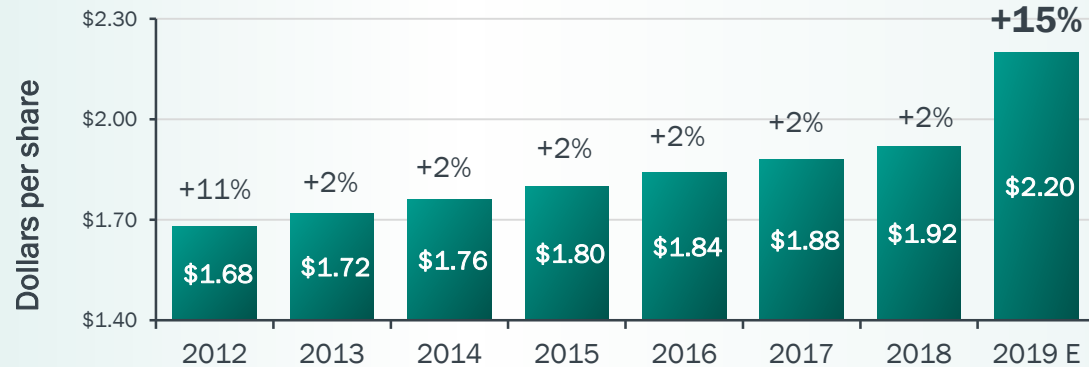
1. The GAAP to non-GAAP reconciliation is available in the Supplemental Tables to Merck's Q4 2018 earnings release. Additionally, please refer to slide 21 in the appendix which provides details on the adoption of new accounting standard in 2018 that required prior periods be recast to conform to the new presentation.

2. Divestitures include Merck Consumer Care, certain pharmaceutical products such as Saphris, Cosopt/Trusopt, and others, as well as AstraZeneca joint venture

# BALANCED APPROACH TO CAPITAL ALLOCATION

## INVESTING IN THE BUSINESS AND CREATING VALUE FOR SHAREHOLDERS

### Commitment to the Dividend



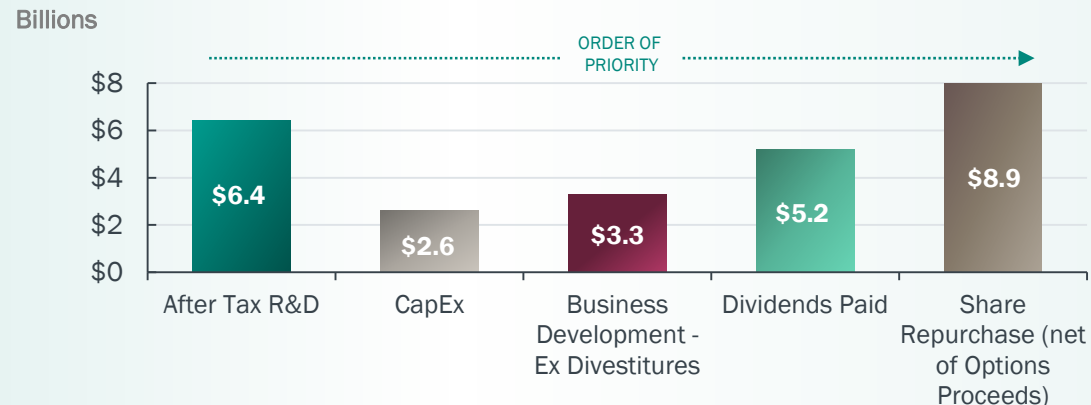
### Capital Investments



# \$16.0B

Over 5 years, including expanding manufacturing capacity for Oncology, Vaccines, and Animal Health. Includes approximately \$9B in the U.S.

### Over the Past 12 Months



### Balanced Capital Allocation to Return Cash to Shareholders While Investing in Growth

- Quarterly dividend increased 15%
- Additional \$10 billion share buyback authorized
  - Entered into \$5 billion accelerated share repurchase program
- ~\$14 billion in 2018 dividend and share repurchases

# FOCUSED INVESTMENT IN R&D CREATES SUSTAINABLE VALUE



LONDON



CAMBRIDGE, MASSACHUSETTS



SOUTH SAN FRANCISCO

**Committed to being the premier, research-intensive biopharmaceutical company, focused on the critical innovations that will address areas of unmet need**

- Product portfolio and pipeline is built on the allocation of capital and resources toward drug discovery and clinical development of our most promising assets, acquisitions and collaborations
- R&D model is designed to increase productivity and improve the probability of success by prioritizing the Company's research and development resources on its highest priority candidates
- R&D focus is on conditions that represent some of today's most significant health challenges – like cancer, infectious diseases, such as HIV, cardio-metabolic disease, and Alzheimer's disease, and we are on the front lines in the fight against emerging global pandemics, such as Ebola and antibiotic-resistant infection

# FULL-YEAR 2019 GUIDANCE

	2019 GUIDANCE	2019 KEY ASSUMPTIONS
Revenue	\$43.2B - \$44.7B +2% to +6% (+3% to +7% ex-FX)	<ul style="list-style-type: none"> <li>Assumes approximately 1% negative FX impact</li> </ul>
Non-GAAP Gross Margin <sup>1</sup>	Roughly in line with 2018	<ul style="list-style-type: none"> <li>Improved product mix offset by price, royalties, FX and collaboration milestones</li> </ul>
Non-GAAP Operating Expenses <sup>2</sup>	Low to mid single-digit increase	<ul style="list-style-type: none"> <li>Increased R&amp;D investment</li> </ul>
Other (Income) / Expense	Roughly zero	<ul style="list-style-type: none"> <li>Assumed negative impact from equity investments</li> <li>Higher net interest expense</li> </ul>
Tax	18.5% - 19.5%	
Shares Outstanding	~2.6B	
<b>GAAP EPS <sup>3</sup></b>	<b>\$3.97 - \$4.12</b>	
<b>Non-GAAP EPS <sup>3</sup></b>	<b>\$4.57 - \$4.72</b> <b>+5% to +9% (+4% to +8% ex-FX)</b>	<ul style="list-style-type: none"> <li>Assumes approximately 1% positive FX impact</li> </ul>

1. GAAP Gross Margin: Low single digit increase compared to 2018

2. GAAP Operating Expenses: Mid single digit decrease compared to 2018

3. The GAAP to non-GAAP reconciliation is available in Merck's Q4 2018 earnings release

# WHAT TO WATCH

## KEY CLINICAL & REGULATORY CATALYSTS THROUGH 2020

### Oncology Clinical Readouts

KEYTRUDA	KN-204	cHL (Ph3)	2019
	KN-604	SCLC (Ph3)	
	KN-240	2L+ HCC (Ph3)	
	KN-062	1L Gastric (Ph3)	
	KN-057	NMIBC Bladder (Ph2)	
	KN-119	2L TNBC (Ph3)	
	KN-361	1L Bladder (Ph3)	
	KN-177	1L MSI-H CRC (Ph3)	
	KN-522	Neoadjuvant/Adjuvant TNBC (Ph3)	
	KN-355	1L TNBC (Ph3)	
	KN-629	2L Cutaneous Squamous Cell Carcinoma (Ph2)	
	KN-122	2L+ Nasopharyngeal Carcinoma (Ph3)	2020
	KN-799	Stage III NSCLC (Ph2)	
KEYTRUDA PRESENTATION	KN-426	1L RCC (Ph3)	2.16.19
Lynparza	POLO	gBRCAm 1L Pancreatic (Ph3)	2019
	PROfound	Prostate Cancer (Ph3)	
	PAOLA-1	1L Ovarian Combination (Ph3)	
Lenvima	KN-581/ Study 307	1L RCC Combination with KEYTRUDA	2020

### Vaccines, Hospital/Specialty and Other Clinical Readouts

MK-8591	Combination with doravirine/3TC (Ph2)	2019
MK-7264	Endometriosis-related Pain (Ph2)	
V114	Study in Healthy Infants (Ph2)	
ZERBAXA	HABP/VABP data presentation (Ph3)	
V114	Eight Ph3 Studies	2019-2021
MK-7264	Chronic Cough (Ph3)	2020
Vericiguat	Heart Failure (Ph3)	

### Regulatory

KN-054	Adj. Melanoma PDUFA	Feb 2019
KN-042	1L PD-L1+ NSCLC PDUFA	April 2019
Lynparza	2L Metastatic Breast Cancer Approval (EU)	1H19
MK-7655a	PDUFA	July 2019
ZERBAXA	Filing	Under way
KN-181	Filing	Under way
KN-426	Filing	Under way
KN-048	Filing	Under way
DELSTRIGO/ PIFELTRO	Filings	Under way

# MERCK PIPELINE

## Phase 2

### ONCOLOGY

#### KEYTRUDA

Cutaneous Squamous Cell Carcinoma  
Advanced Solid Tumors  
Prostate  
Ovarian

#### MK-7690

Colorectal cancer

#### LENVIMA

Non Small Cell Lung  
Biliary Tract

#### CAVATAK (V937)

Melanoma

#### Selumetinib (MK-5618)

Pediatric Neurofibromatosis Type-1

### VACCINES

#### V160

Cytomegalovirus

#### MK-1654

Respiratory Syncytial Virus

### DIABETES

#### MK-8521

Diabetes Mellitus

### NEUROSCIENCE

#### MK-8189

Schizophrenia

### INFECTIOUS DISEASES

#### MK-8591

HIV Infection

### GENERAL MEDICINE

#### GEFAPIXANT (MK-7264)

Endometriosis

## Phase 3

### ONCOLOGY

#### KEYTRUDA

Breast  
Colorectal  
Esophageal  
Gastric  
Hepatocellular  
Nasopharyngeal  
Renal  
Small Cell Lung  
Mesothelioma  
Endometrial

#### LENVIMA

Endometrial  
Renal

#### LYNPARZA

Pancreatic  
Prostate

### HOSPITAL ACUTE CARE

#### SIVEXTRO (MK-1986)

HABP/VABP Bacterial Pneumonia

#### ZERBAXA (MK-7625A)

HABP/VABP Bacterial Pneumonia

#### RELEBACTAM (MK-7665A)

Bacterial Infection

### GENERAL MEDICINE

#### GEFAPIXANT (MK-7264)

Cough

### VACCINES

#### V920

Ebola

#### V114

Pneumo conjugate

### CARDIOVASCULAR

#### VERICIGUAT (MK-1242)

Heart Failure

## Under Regulatory Review

### ONCOLOGY

#### KEYTRUDA

Squamous NSCLC\*  
Hepatocellular Carcinoma\*  
Merkel Cell Carcinoma\*  
PD-L1+ NSCLC  
Adjuvant Melanoma

#### LYNPARZA (EU)

Breast Cancer

### VACCINES

#### V419 \*

Pediatric hexavalent combination

### INFECTIOUS DISEASES

#### MK-1439 (EU)

doravirine

#### MK-1439A (EU)

doravirine/lamivudine/  
tenofovir disoproxil

# CORPORATE RESPONSIBILITY THAT CREATES SUSTAINABLE VALUE



CORPORATE RESPONSIBILITY IS AT THE HEART OF MERCK'S MISSION TO DISCOVER, DEVELOP AND PROVIDE INNOVATIVE PRODUCTS AND SERVICES THAT SAVE AND IMPROVE LIVES



## Access to Health

### Increasing access to health advances Merck's efforts to serve more patients

- Long history of making medicines and vaccines accessible and affordable through responsible pricing practices and industry-leading patient access programs
- Addressing 88% of the top 20 global burdens of disease with products and pipeline
- Merck for Mothers - 10-year, \$500 million initiative to prevent maternal deaths has reached more than 7 million women worldwide
- Our 31 year old MECTIZAN® Donation Program for river blindness and lymphatic filariasis that is making progress to eliminate these diseases in endemic countries. We've eliminated river blindness in 4 Latin American countries and in parts of 5 African countries so far, and we have eliminated lymphatic filariasis in 1 African country
- Rolling submission to FDA for V920, Merck's investigational vaccine for Ebola Zaire disease



## Employees

### Fostering diverse and gender-balanced workforce essential to performance as a research-intensive company and to attracting most talented scientists

- Numerous programs to engage employees and promote positive work environment (including female mentorship by female Board members)
  - 40% of new hires in 2017 were female
  - 40% of management roles in 2017 held by women
  - 36% of new U.S. hires in 2017 were members of underrepresented ethnic groups
  - 23% of U.S. executive roles in 2017 were held by members of underrepresented ethnic groups



## Environmental Sustainability

### Executing sustainability strategy to take advantage of opportunities to reduce environmental impact across operations and supply chain


- Energy-conservation and water-use-reduction initiatives
- Reducing environmental impacts of new products, packaging, buildings and equipment
- Purchasing electricity from renewable energy sources to reduce greenhouse gas emissions
- Collaborating with suppliers and customers to address shared needs and interests in environmentally beneficial ways



## Ethics and Transparency

### Earning trust and confidence of stakeholders is critical for a company in the business of marketing and selling medicines and vaccines

- Demonstrated commitment to transparency through disclosures about our business and how we operate, including being first pharmaceutical company to publish a multi-year report about pricing practices
- Work with broad range of stakeholders to help develop and advance innovative financing and payment models to improve access
- Maintained trendsetter status on the 2018 CPA-Zickin index, a benchmark for S&P 500 companies on their political disclosure and accountability policies and practices.



# We try never to forget that medicine is for the people.

It is not for the profits. The profits follow, and if we have remembered that, they have never failed to appear.

— GEORGE W. MERCK



**MERCK**

INVENTING FOR LIFE

**Thank You.**



# APPENDIX

# PENSION ACCOUNTING STANDARD RESTATEMENT

MILLIONS	2014		2015		2016		2017	
	GAAP	Non-GAAP	GAAP	Non-GAAP	GAAP	Non-GAAP	GAAP	Non-GAAP
Cost of Sales	16,903	11,167	15,043	9,813	14,030	9,814	12,912	9,587
SG&A	11,816	11,189	10,508	9,994	10,017	9,844	10,074	10,028
R&D	7,290	6,642	6,796	6,705	10,261	6,967	10,339	7,468
Restructuring Costs	1,013	0	619	0	651	0	776	0
Other (Income)/Expense	(12,068)	(350)	1,131	(48)	189	(416)	(500)	(503)

On January 1, 2018, the company adopted a new accounting standard related to defined benefit plans that requires the components of net benefit cost/credit (other than service costs) be presented in the statement of income outside of operating expenses. The new accounting standard requires previously reported amounts be reclassified to conform to the new presentation. There was no impact to net income as a result of adopting the new standard. The table above provides details of the effects of adopting the standard for full years 2017, 2016, 2015 and 2014.