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

Forward-Looking Statement of Merck & Co., Inc., Kenilworth, N.J., USA

This presentation from 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 2018 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).
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.

**Vision**
Committed to being the premier, research-intensive biopharmaceutical company.

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

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**CONSISTENT SCIENCE-DRIVEN STRATEGY TO CREATE VALUE FOR PATIENTS AND SHAREHOLDERS**

**REINVENT DISCOVERY**
Research and advance the pipeline.

**CREATE VALUE FOR**
Shareholders and patients.

**DELIVER TOP AND**
Bottom line growth.
Q1 PERFORMANCE HIGHLIGHTS
ALL GROWTH RATES EXCLUDE IMPACT OF EXCHANGE

DELIVERED WORLDWIDE SALES GROWTH

$10.8B

↑ 11%

DROVE NON-GAAP EPS GROWTH

$1.22

GAAP $1.12¹

↑ 18%

RETURNED $2.5 BILLION TO SHAREHOLDERS THROUGH DIVIDENDS AND SHARE REPURCHASES

EXECUTED ON VALUE-ENHANCING BUSINESS DEVELOPMENT, INCLUDING THE ACQUISITIONS OF IMMUNE DESIGN AND ANTELLIQ

ANNOUNCED FIVE ADDITIONAL APPROVALS FOR KEYTRUDA GLOBALLY, INCLUDING 1L NSCLC (KN-189) IN CHINA AND 1L RCC (KN-426) IN THE U.S.

ANNOUNCED TWO FILING ACCEPTANCES IN OUR HOSPITAL/SPECIALTY BUSINESS IN THE U.S.

EXPANDED V114 PHASE 3 PROGRAM WITH ADDITIONAL STUDIES

1. The GAAP to non-GAAP reconciliation is available in the Supplemental Tables to Merck’s Q1 2019 earnings release.
ONCOLOGY: STRONG KEYTRUDA AND LYNPARZA GROWTH

- KEYTRUDA growth of +60%\textsuperscript{1} year-over-year including +69%\textsuperscript{1} in International markets
- Ex-U.S. approvals and reimbursement of 1L NSCLC (KEYNOTE-189 and KEYNOTE-407)
- Encouraging early customer feedback in adjuvant melanoma
- Lynparza sales doubled in the quarter driven by 1L ovarian maintenance launch (SOLO-1) in the U.S. and expanded ovarian indication in Europe

\textsuperscript{1} All growth rates exclude the impact of foreign exchange.
VACCINES: GARDASIL GLOBAL UPTAKE REMAINS ROBUST

- Vaccine sales growth of +24%¹ driven by GARDASIL and GARDASIL 9, fueled by ongoing commercial launch in China and demand in Europe, partially offset by public sector buying patterns in the U.S.
- Pediatric vaccines, including PROQUAD / MMR-II / VARIVAX and ROTATEQ also contributed to vaccines growth

1. All growth rates exclude the impact of foreign exchange.
HOSPITAL/SPECIALTY: BRIDION DEMAND REMAINS STRONG

- BRIDION annualizing at over $1 billion. Growth in the U.S. reflects increased utilization of BRIDION in procedures where neuromuscular blockade reversal agents are used.
- Ongoing PREVYMIS launch contributing to performance.
- Successful ZERBAXA trial in pneumonia with June 3 FDA PDUFA date.

1. All growth rates exclude the impact of foreign exchange.
International growth offsets U.S. decline highlighting benefits of global scale

- Growth in companion animals, led by BRAVECTO, drove sales in the quarter. Growth also supported by new poultry and swine product sales
- Customer buying patterns within the U.S. business for livestock as well as a 7% negative impact from FX, offset demand growth
- Closed acquisition of Antelliq group, which establishes Merck as a leader in digital animal identification, traceability and monitoring solutions

1. All growth rates exclude the impact of foreign exchange.
ROBUST INTERNATIONAL PHARMACEUTICAL GROWTH LED BY CHINA

EX-U.S. GLOBAL PHARMACEUTICAL SALES +12%

1 All growth rates exclude the impact of exchange.
2 Europe primarily represents all European Union countries and the European Union accession markets.
FINANCIAL HIGHLIGHTS
**FINANCIAL RESULTS SUMMARY – Q1 2019**

**DELIVERED +11% REVENUE GROWTH AND +18% NON-GAAP EPS GROWTH (EX-FX)**

<table>
<thead>
<tr>
<th></th>
<th>Q1 2019</th>
<th>Q1 2018</th>
<th>Change</th>
<th>Change Ex-FX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>$10,816</td>
<td>$10,037</td>
<td>8%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>GAAP net income</strong></td>
<td>2,915</td>
<td>736</td>
<td>&gt; 100%</td>
<td>&gt; 100%</td>
</tr>
<tr>
<td><strong>Non-GAAP net income that excludes certain items</strong></td>
<td>3,175</td>
<td>2,844</td>
<td>12%</td>
<td>13%</td>
</tr>
<tr>
<td><strong>GAAP EPS</strong></td>
<td>1.12</td>
<td>0.27</td>
<td>&gt; 100%</td>
<td>&gt; 100%</td>
</tr>
<tr>
<td><strong>Non-GAAP EPS that excludes certain items</strong></td>
<td>1.22</td>
<td>1.05</td>
<td>16%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>GAAP Gross Margin</strong></td>
<td>71.8%</td>
<td>68.3%</td>
<td>3.5pts</td>
<td>2.4pts</td>
</tr>
<tr>
<td><strong>Non-GAAP Gross Margin</strong></td>
<td>75.9%</td>
<td>75.7%</td>
<td>0.2pts</td>
<td>-0.9pts</td>
</tr>
</tbody>
</table>

1. Net income attributable to Merck & Co., Inc.
2. Merck is providing certain 2019 and 2018 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 Q1 2019 earnings press release.
BALANCED APPROACH TO CAPITAL ALLOCATION

INVESTING IN THE BUSINESS AND CREATING VALUE FOR SHAREHOLDERS

Commitment to the Dividend

<table>
<thead>
<tr>
<th>Year</th>
<th>Dollars per share</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$1.68</td>
</tr>
<tr>
<td>2013</td>
<td>$1.72</td>
</tr>
<tr>
<td>2014</td>
<td>$1.76</td>
</tr>
<tr>
<td>2015</td>
<td>$1.80</td>
</tr>
<tr>
<td>2016</td>
<td>$1.84</td>
</tr>
<tr>
<td>2017</td>
<td>$1.88</td>
</tr>
<tr>
<td>2018</td>
<td>$1.92</td>
</tr>
<tr>
<td>2019 E</td>
<td>$2.20 (+15%)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Billions</th>
</tr>
</thead>
<tbody>
<tr>
<td>After-Tax R&amp;D</td>
<td>$6.5</td>
</tr>
<tr>
<td>CapEx</td>
<td>$2.8</td>
</tr>
<tr>
<td>Business Development - Ex Divestitures</td>
<td>$2.4</td>
</tr>
<tr>
<td>Dividends Paid</td>
<td>$5.3</td>
</tr>
<tr>
<td>Share Repurchase (net of Options Proceeds)</td>
<td>$9.1</td>
</tr>
</tbody>
</table>

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

- Quarterly dividend increased 15%
- Additional $10 billion share buyback authorized
  - Completed $5 billion accelerated share repurchase program
- ~$14 billion in 2018 dividend and share repurchases
# UPDATED FULL-YEAR 2019 GUIDANCE

<table>
<thead>
<tr>
<th></th>
<th>PRIOR GUIDANCE</th>
<th>2019 UPDATED GUIDANCE</th>
<th>2019 KEY ASSUMPTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$43.2B - $44.7B +2% to +6% (+3% to +7% ex-FX)</td>
<td>$43.9B - $45.1B +4% to +7% (+5% to +8% ex-FX)</td>
<td>• Narrowed and Raised; Assumes slightly over 1% negative FX impact</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$43.2B - $44.7B +2% to +6% (+3% to +7% ex-FX)</td>
<td>• Improved product mix and favorable FX offset by price, royalties, and collaboration milestones</td>
</tr>
<tr>
<td><strong>Non-GAAP Gross Margin</strong></td>
<td>Roughly in line with 2018</td>
<td>Roughly in line with 2018</td>
<td>• Increased R&amp;D investment</td>
</tr>
<tr>
<td><strong>Non-GAAP Operating Expenses</strong></td>
<td>Low to mid single-digit increase</td>
<td>Low to mid single-digit increase</td>
<td>• Assumes significantly lower gains from equity investments</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Higher net interest expense</td>
</tr>
<tr>
<td><strong>Other (Income) / Expense</strong></td>
<td>Roughly zero</td>
<td>Roughly zero</td>
<td></td>
</tr>
<tr>
<td><strong>Tax Rate</strong></td>
<td>18.5% - 19.5%</td>
<td>18.5% - 19.5%</td>
<td></td>
</tr>
<tr>
<td><strong>Shares Outstanding</strong></td>
<td>~2.6B</td>
<td>~2.6B</td>
<td></td>
</tr>
<tr>
<td><strong>GAAP EPS</strong></td>
<td>$3.97 - $4.12</td>
<td>$4.02 - $4.14</td>
<td>• Narrowed and Raised; Assumes slightly positive FX impact</td>
</tr>
<tr>
<td><strong>Non-GAAP EPS</strong></td>
<td>$4.57 - $4.72 +5% to +9% (+4% to +8% ex-FX)</td>
<td>$4.67 - $4.79 +8% to +10% (+8% to +10% ex-FX)</td>
<td></td>
</tr>
</tbody>
</table>

1. GAAP Gross Margin: Low single digit increase compared to 2018
2. GAAP Operating Expenses: Mid single digit decrease compared to 2018
3. GAAP Tax Rate: 16.5% - 17.5%
4. The GAAP to non-GAAP reconciliation is available in Merck's Q1 2019 earnings release
## WHAT TO WATCH
### KEY CLINICAL & REGULATORY CATALYSTS THROUGH 2020

#### Oncology Clinical Readouts

<table>
<thead>
<tr>
<th>Study</th>
<th>Disease</th>
<th>Phases</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN-057</td>
<td>NMIBC Bladder</td>
<td>(Ph2)</td>
<td>2019</td>
</tr>
<tr>
<td>KN-119</td>
<td>2L TNBC</td>
<td>(Ph3)</td>
<td>2019</td>
</tr>
<tr>
<td>KN-361</td>
<td>Bladder</td>
<td>(Ph3)</td>
<td>2019</td>
</tr>
<tr>
<td>KN-177</td>
<td>MSI-H CRC</td>
<td>(Ph3)</td>
<td>2019</td>
</tr>
<tr>
<td>KN-522</td>
<td>Neoadjuvant/Adjuvant TNBC</td>
<td>(Ph3)</td>
<td>2019</td>
</tr>
<tr>
<td>KN-355</td>
<td>1L TNBC</td>
<td>(Ph3)</td>
<td>2019</td>
</tr>
<tr>
<td>KN-629</td>
<td>2L Cutaneous Squamous Cell Carcinoma</td>
<td>(Ph2)</td>
<td>2019</td>
</tr>
<tr>
<td>KN-604</td>
<td>1L SCLC</td>
<td>(Ph3)</td>
<td>2020</td>
</tr>
<tr>
<td>KN-122</td>
<td>2L+ Nasopharyngeal Carcinoma</td>
<td>(Ph3)</td>
<td>2020</td>
</tr>
</tbody>
</table>

#### Keytruda

**POLO**
- gBRCAm 1L Pancreatic (Ph3) - Topline results announced | 2019

**PROfound**
- Prostate Cancer (Ph3) | 2019

**PAOLA-1**
- 1L Ovarian Combination (Ph3) | 2020

#### Lyaprazza

<table>
<thead>
<tr>
<th>Study</th>
<th>Disease</th>
<th>Phases</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN-581/ Study 307</td>
<td>1L RCC Combination with KEYTRUDA</td>
<td>(Ph2)</td>
<td>2020</td>
</tr>
</tbody>
</table>

#### Lenvima

<table>
<thead>
<tr>
<th>Study</th>
<th>Disease</th>
<th>Phases</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>MK-8591</td>
<td>Combination with doravirine</td>
<td>(Ph2)</td>
<td>2019</td>
</tr>
<tr>
<td>MK-7264</td>
<td>Endometriosis-related Pain</td>
<td>(Ph2)</td>
<td>2019</td>
</tr>
<tr>
<td>V114</td>
<td>Study in Healthy Infants</td>
<td>(Ph2)</td>
<td>2019</td>
</tr>
<tr>
<td>ZERBAXA</td>
<td>HABP/VABP data presentation</td>
<td>(Ph3)</td>
<td>2019</td>
</tr>
<tr>
<td>MK-7655A</td>
<td>HABP/VABP</td>
<td>(Ph3)</td>
<td>2019</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Study</th>
<th>Disease</th>
<th>Phases</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>KN-057</td>
<td>NMIBC Bladder</td>
<td>(monotherapy and combo) PDUFA</td>
<td>June 2019</td>
</tr>
<tr>
<td>KN-158/028</td>
<td>3L SCLC</td>
<td>PDUFA</td>
<td>June 2019</td>
</tr>
<tr>
<td>ZERBAXA</td>
<td>HABP/VABP</td>
<td>PDUFA</td>
<td>June 2019</td>
</tr>
<tr>
<td>MK-7655A</td>
<td>Bacterial infections</td>
<td>PDUFA</td>
<td>July 2019</td>
</tr>
</tbody>
</table>

#### Regulatory

- KN-048 | 1L H&N (monotherapy and combo) PDUFA | June 2019 |
- KN-158/028 | 3L SCLC | PDUFA | June 2019 |
- ZERBAXA | HABP/VABP | PDUFA | June 2019 |
- MK-7655A | Bacterial infections | PDUFA | July 2019 |

Approximate timelines defined by clinicaltrials.gov or previously-disclosed interim potentials.
# MERCK PIPELINE

## Phase 2

**ONCOLOGY**
- **KEYTRUDA**
  - Cutaneous Squamous Cell Carcinoma
  - Advanced Solid Tumors
  - Prostate
- **MK-7690**
  - Colorectal cancer

**VACCINES**
- **V160**
  - Cytomegalovirus
- **MK-1654**
  - Respiratory Syncytial Virus

**DIABETES**
- **MK-8521**
  - Diabetes Mellitus

**INFECTIOUS DISEASES**
- **MK-8591**
  - HIV Infection

**NEUROSCIENCE**
- **MK-8189**
  - Schizophrenia

**GENERAL MEDICINE**
- **GEFAPIXANT (MK-7264)**
  - Endometriosis-related pain

## Phase 3

**ONCOLOGY**
- **KEYTRUDA**
  - Non Small Cell Lung
  - Biliary Tract
  - CAVATAK (V937)
  - Melanoma
  - Selumetinib (MK-5618)
  - Pediatric Neurofibromatosis Type-1
- **LENVIMA**
  - Endometrial
  - Renal
- **LYNPARZA**
  - Pancreatic
  - Prostate

**HOSPITAL ACUTE CARE**
- **SIVEXTRÓ (MK-1986)**
  - HABP/VABP Bacterial Pneumonia

**VACCINES**
- **V114**
  - Pneumo conjugate

**GENERAL MEDICINE**
- **GEFAPIXANT (MK-7264)**
  - Cough

**CARDIOVASCULAR**
- **VERICIGUAT (MK-1242)**
  - Heart Failure

## Under Regulatory Review

**ONCOLOGY**
- **KEYTRUDA**
  - Renal Cell Carcinoma*
  - Small Cell Lung Cancer
  - Squamous Cell NSCLC (EU)*
  - Head and Neck Cancer
  - PD-L1+ NSCLC*
  - Alternative Dosing Q6W (EU)*
- **LYNPARZA (EU)**
  - Breast Cancer*
  - Ovarian Cancer

**HOSPITAL ACUTE CARE**
- **ZERBAXA (MK-7625A)**
  - HABP/VABP Bacterial Pneumonia
- **RELEBACTAM + (MK-7665A)**
  - Bacterial Infection

**VACCINES**
- **V920**
  - Ebola

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As of Feb. 22, 2019

*Approved post Feb. 22, 2019
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 30+ 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 6 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
- Integrating the SDGs into our reporting to demonstrate our commitment to sustainable development
MERCK 2019 INVESTOR DAY

Thursday, June 20, 2019
New York, NY

Event will be available via webcast at https://investors.merck.com
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
Thank You.