Merck 1Q 2020 Earnings
Forward-looking statement of Merck & Co., Inc.,
Kenilworth, N.J., USA

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. Examples of forward-looking statements include statements with respect to the company’s plans to spinoff certain of its businesses into an independent company, the timing and structure of such spinoff, the characteristics of the business to be separated, the expected benefits of the spin-off to the company and the expected effect on the company’s dividends. 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 whether the proposed spinoff will be completed on the proposed timetable or at all or 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 the recent global outbreak of novel coronavirus disease (COVID-19); 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 2019 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).
Q1 performance highlights

Delivered worldwide sales growth\textsuperscript{1}

$12.1B
\uparrow +13\%

Drove non-GAAP EPS growth\textsuperscript{1}

$1.50
\uparrow +26\%

- Returned $2.8 billion to shareholders through dividends and share repurchases
- Continued commitment to value-enhancing business development with spend of $2.6 billion
- Completed the acquisition of ArQule

- Announced positive top-line results for phase 3 trials of investigational gefapixant in chronic cough
- Presented results from phase 3 VICTORIA trial studying investigational vericiguat in patients with worsening heart failure with reduced ejection fraction
- Moved 5 early oncology assets into Phase 2 (MK-4280, MK-7684, MK-1454, MK-1308, MK-5890) development and 1 into Phase 3 (MK-6482).
- Announced KEYTRUDA top-line results for two trials including: positive PFS for KN-204 in cHL, positive PFS for KN-355 in TNBC.
- Received FDA approval for KEYTRUDA in NMIBC based on KN-057
- Announced registration for ERVEBO in four African nations: DRC, Burundi, Ghana and Zambia

1. Growth rates exclude impact of foreign exchange
2. The GAAP to non-GAAP reconciliation is available in the Supplemental Tables to Merck’s Q1 2020 earnings release.
3. GAAP EPS $1.26
Oncology: continued strength & leadership across portfolio

- KEYTRUDA sales of $3.3B grew +46% year-over-year
  - In the U.S., sales of $1.9B were driven by all key tumors and continued strengthening of overall leadership position in I/O market
  - +44% growth in international markets, as lung continues to drive growth globally
- Oncology portfolio continues to benefit from growth of Lynparza, +86%, and Lenvima, +73%
  - Lynparza remains leading PARPi in the U.S.
  - Lenvima maintains market leadership in HCC in U.S., and is benefitting from strong launch in combination with KEYTRUDA in EC

1. All growth rates exclude the impact of foreign exchange.
Vaccines: growth driven by strong global demand

- Vaccines sales grew +16% year-over-year
- GARDASIL sales of ~$1.1B grew +33%, benefitting significantly from timing of shipments in China and timing of CDC purchases in the U.S., which contributed ~$190M, partially offset by the impact of COVID-19
- GARDASIL sales also reflect strong underlying global demand
- PNEUMOVAX sales of ~$260M, +40%, also contributed to growth, primarily due to heightened interest in pneumococcal vaccination amidst the COVID-19 pandemic

1. All growth rates exclude the impact of foreign exchange.
Hospital: BRIDION continues to drive global growth

- BRIDION sales of ~$300M grew +19%, driven by demand growth across all major regions
- Continued success from launch of PREVYMIS for CMV prophylaxis in certain stem cell transplant recipients, with sales of ~$60M, +90%
- Demonstrated commitment to the development of novel antibiotics and antivirals as highlighted by recent approvals, acceptances and data readouts

1. All growth rates exclude the impact of foreign exchange.
Animal Health: innovative portfolio positioned for long-term success

- Animal Health sales were ~$1.2B, +21%
- Increase in advance purchases amidst the COVID-19 pandemic positively impacted the Animal Health business by ~$60M
- Livestock, with sales of ~$740M, grew +24%, largely benefitting from the contribution of the Antelliq acquisition and the COVID-19 related buy-in
- Companion Animals, with sales of ~$475, grew +17% driven by the BRAVECTO line of products and the COVID-19 related buy-in

1. All growth rates exclude the impact of foreign exchange.
Global Human Health performance

Global pharmaceutical sales +12%¹

1. All growth rates exclude the impact of foreign exchange.
2. Europe primarily represents all European Union countries and the European Union accession markets.
Q1 2020 financial results summary:
Delivered leveraged P&L with strong revenue and EPS growth

<table>
<thead>
<tr>
<th></th>
<th>Q1 2020</th>
<th>Q1 2019</th>
<th>Change</th>
<th>Change Ex-FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$12.1</td>
<td>$10.8</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>GAAP net income(^1)</td>
<td>$3.2</td>
<td>$2.9</td>
<td>10%</td>
<td>13%</td>
</tr>
<tr>
<td>Non-GAAP net income</td>
<td>$3.8</td>
<td>$3.2</td>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>that excludes certain items(^1,(^2)</td>
<td>$3.8</td>
<td>$3.2</td>
<td>20%</td>
<td>24%</td>
</tr>
<tr>
<td>GAAP EPS</td>
<td>$1.26</td>
<td>$1.12</td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td>Non-GAAP EPS that excludes certain items(^2)</td>
<td>$1.50</td>
<td>$1.22</td>
<td>23%</td>
<td>26%</td>
</tr>
<tr>
<td>GAAP Gross Margin</td>
<td>72.5%</td>
<td>71.8%</td>
<td>0.7pts</td>
<td>1.1pts</td>
</tr>
<tr>
<td>Non-GAAP Gross Margin(^2)</td>
<td>75.5%</td>
<td>75.9%</td>
<td>-0.4pts</td>
<td>-0.1pts</td>
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</table>

1. Net income attributable to Merck & Co., Inc.
2. Merck is providing certain 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. In addition, senior management’s annual compensation is derived in part using non-GAAP pretax income. This information should be considered in addition to, but not as a substitute for or superior to, information prepared in accordance with GAAP.
Balanced approach to capital allocation:
Investing in the business and creating value for shareholders

Capital Investments
2019 to 2023

~$19.0B
Over 5 years, including expanding manufacturing capacity for Oncology, Vaccines, and Animal Health. Includes >$10.0B in the U.S.

Balanced Capital Allocation to Return Cash to Shareholders While Investing in Growth Over Past 12 Months

- $10.6 billion in dividend and share repurchases
  - Remain committed to the dividend, which increased 11% in 2020
  - Temporarily suspended share repurchase program; returned $5.0 billion share repurchases (excluding option proceeds)
- $9.0 billion invested in R&D ($7.4 billion after-tax)
- ~$8 billion spent on over 80 transactions, including recently closed ArQule acquisition
Remain confident in long-term fundamental strength of business

Strong underlying patient demand for our innovative medicines and vaccines, which address significant unmet medical need

- First quarter results demonstrate underlying strength of the business
- Operational and financial strength, including our strong balance sheet, allows us to execute on our key priorities
- Clinical programs and timelines remain on track
- Strategic focus on innovation remains our competitive advantage
Merck is actively engaged in playing a role in & finding solutions for the COVID-19 pandemic

<table>
<thead>
<tr>
<th>R&amp;D Efforts</th>
<th>Relief Efforts</th>
<th>Clinical Trials</th>
<th>Manufacturing and Supply</th>
<th>Facilities and Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Team of scientists researching COVID-19 and assessing our antiviral candidates and vaccine assets</td>
<td>• Supporting communities through product &amp; PPE donations, and funding relief organizations</td>
<td>• Continuity of clinical trials was maintained in 1Q using operational continuity plans that were scaled regionally as the pandemic spread</td>
<td>• To date, COVID-19 has not had a material impact on the production and supply of our medicines and vaccines</td>
<td>• Majority of manufacturing sites are fully operational and labs are focused on essential operations</td>
</tr>
<tr>
<td>• Thoughtful selection of proven platforms that have been used to generate vaccines with desirable qualities</td>
<td>• Provided 800,000 surgical masks in NY and NJ</td>
<td>• Making every effort to ensure patients in affected areas enrolled in clinical trials continue to receive treatment, care, and monitoring</td>
<td>• Continue to have normal supply levels for most of our products, including KEYTRUDA and GARDASIL</td>
<td>• Our office-based colleagues are primarily working from home</td>
</tr>
<tr>
<td>• In discussions with multiple groups, focusing on three viral vaccine platforms</td>
<td>• Merck for Mothers donation to help systems better meet needs of pregnant women</td>
<td>• Conditions are fluid and evolving, but as local conditions allow, we are enrolling patients in new and ongoing studies</td>
<td>• In general, Merck carries several months of inventory</td>
<td>• In China, all of our offices, labs and plants are now open, though many employees continue to work from home</td>
</tr>
<tr>
<td>• Engaged with a range of external organizations, including a research collaboration with ISB and the NIH-led ACTIV partnership</td>
<td>• Enabling medically trained employees to volunteer to aid communities while maintaining base pay</td>
<td>• Updating access and assistance programs</td>
<td>• We currently believe supply of our medicines and vaccines will remain at normal levels throughout the pandemic</td>
<td>• In many markets, paused in-person interactions with HCPs, and field-based employees are working from home</td>
</tr>
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</table>
### Key guidance assumptions: COVID-19

<table>
<thead>
<tr>
<th>Patient Access</th>
<th>Peak Outbreak</th>
<th>Normalization</th>
<th>Variability</th>
</tr>
</thead>
</table>
| • Reduced access to hospitals and other healthcare sites, particularly those treating COVID-19, resulting in decreased patient visits | • Peak of the virus assumed in the second quarter in the U.S. and EU  
• Current social distancing measures in the U.S. and EU to extend into June | • Anticipate gradual return to normal operations beginning late in the second quarter and through the third quarter  
• Full return to normal operations in the fourth quarter | • These assumptions will vary based on:  
  o Duration, spread and severity of outbreak  
  o Timing of return to normal conditions |
Human Health commercial considerations: COVID-19

<table>
<thead>
<tr>
<th>Oncology</th>
<th>Vaccines</th>
<th>Hospital</th>
<th>Animal Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>• To prioritize patients based on severity and the immediate needs of different tumor types, oncologists are delaying appointments and procedures.</td>
<td>• Professional recommendations to further reinforce social distancing measures leads to delayed well visits.</td>
<td>• Non-urgent elective procedures have been postponed or canceled in most markets in order to:</td>
<td>• Reduced veterinary visits and decreased protein and milk consumption due to restaurant and school closures will negatively impact volume.</td>
</tr>
<tr>
<td>• This may lead to delays in the start of therapy for newly diagnosed patients and challenges in adhering to dosing schedules for existing patients.</td>
<td>• Based on recommendations from the AAP and CDC, most pediatricians in the U.S. have pushed out routine immunization of all children except those &lt;24 months.</td>
<td>o Slow the spread of disease</td>
<td>o Negative impacts on the economy will have an additional effect on the business.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>o Enable hospital prioritization of COVID patients</td>
<td></td>
</tr>
</tbody>
</table>

Roughly two-thirds of our global Human Health revenue is comprised of physician-administered products.
### Animal Health commercial considerations: COVID-19

**Oncology**
- To prioritize patients based on severity and the immediate needs of different tumor types, oncologists are delaying appointments and procedures.
- This may lead to delays in the start of therapy for newly diagnosed patients and challenges in adhering to dosing schedules for existing patients.

**Vaccines**
- Professional recommendations to further reinforce social distancing measures leads to delayed well visits.
- Based on recommendations from the AAP and CDC, most pediatricians in the U.S. have pushed out routine immunization of all children except those <24 months.

**Hospital**
- Non-urgent elective procedures have been postponed or canceled in most markets in order to:
  - Slow the spread of disease
  - Enable hospital prioritization of COVID patients

**Animal Health**
- Reduced veterinary visits and decreased protein and milk consumption due to restaurant and school closures will negatively impact volume.
- Negative impacts on the economy will have an additional effect on the business.

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**Expect to experience a more protracted recovery timeline from our Animal Health business**
## Updated full-year 2020 guidance

<table>
<thead>
<tr>
<th></th>
<th>Prior Guidance</th>
<th>Updated Guidance</th>
<th>Key Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$48.8B - $50.3B</td>
<td>$46.1B - $48.1B</td>
<td>• Assumes ~2.5% negative FX impact, an incremental ~$750M headwind vs. prior guidance&lt;br&gt;• Reflects assumed COVID-19 impacts</td>
</tr>
<tr>
<td></td>
<td>+4% to +7% (+5% to +8% ex-FX)</td>
<td>-2% to +3% (+1% to +5% ex-FX)</td>
<td></td>
</tr>
<tr>
<td><strong>Non-GAAP Gross Margin Rate</strong></td>
<td>~75.5%</td>
<td>~75.0%</td>
<td>• Reduced due to higher anticipated shipping costs, supplies, amortization and inventory write-offs</td>
</tr>
<tr>
<td><strong>Non-GAAP Operating Expenses</strong></td>
<td>Low single-digit rate increases</td>
<td>Low single-digit rate decrease</td>
<td>• Reduced due to lower promotional and selling costs, delayed clinical program spend due to COVID-19, and FX benefit</td>
</tr>
<tr>
<td><strong>Other (Income) / Expense</strong></td>
<td>~$200M of other expense</td>
<td>~$200M of other expense</td>
<td>• No change</td>
</tr>
<tr>
<td><strong>Tax Rate</strong></td>
<td>17.5% to 18.5%</td>
<td>17.0% to 18.0%</td>
<td>• Reflects favorable impact of earnings mix in lower tax jurisdictions</td>
</tr>
<tr>
<td><strong>Shares Outstanding</strong></td>
<td>~2.54B</td>
<td>~2.54B</td>
<td>• No change; reflects temporary pause in share repurchases</td>
</tr>
<tr>
<td><strong>GAAP EPS</strong></td>
<td>$4.57 to $4.72</td>
<td>$4.14 to $4.29</td>
<td></td>
</tr>
<tr>
<td><strong>Non-GAAP EPS</strong></td>
<td>$5.62 to $5.77</td>
<td>$5.17 to $5.37</td>
<td>• Assumes ~3.5% negative FX impact, an incremental ~$0.11 headwind vs. prior guidance&lt;br&gt;• Reflects assumed COVID-19 impacts</td>
</tr>
<tr>
<td></td>
<td>+8% to +11% (+10% to +13% ex-FX)</td>
<td>0% to +4% (+3% to +7% ex-FX)</td>
<td></td>
</tr>
</tbody>
</table>

1. GAAP Gross Margin Rate: In line with 2019
2. GAAP Operating Expenses: Lower than 2019 by a low-single digit rate
3. GAAP Tax Rate: ~16.5 - 17.5%
4. The GAAP to non-GAAP reconciliation is available in Merck’s Q1 2020 earnings release
Progressing the spinoff of Organon & Co.

Announced Organon & Co. as the new company name

- The Organon name has strong brand equity and engenders great respect among healthcare professionals for its dedication and innovation in women’s health

Continued to make progress on building out strong executive leadership team for Organon & Co.

Rooted in our belief that two, more-focused companies will drive stronger growth and unlock long-term value for patients and shareholders

Continue to expect spinoff of Organon & Co. to be completed in the first half of 2021
Creating long-term value for patients, employees and shareholders

Next 5 Years
Strong execution driving sustainable revenue growth, meaningful margin expansion and accelerated bottom-line growth

5-10 Years
Rich pipeline addressing areas of high unmet need to drive performance over the next 5 to 10 years

10+ Years
Revitalized discovery efforts and increased expertise in biology to deliver ongoing scientific breakthroughs for decades to come

Anchored by our deep bench of talent and commitment to our mission
Corporate responsibility that creates sustainable value

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 support programs
- Addressing 88% of the top 20 global burdens of disease with products and pipeline
- Merck for Mothers - $500 million initiative to prevent maternal deaths has reached more than 11 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: eliminated river blindness in 4 Latin American countries and in parts of 6 African countries so far, and we have eliminated lymphatic filariasis in 2 countries in Africa and the Middle East
- ERVEBO, Merck’s vaccine for the prevention of disease caused by Zaire ebolavirus, is FDA approved (over 300,000 patients in the DRC vaccinated to-date with investigational doses)

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)
  - 51% of new hires in 2018 were female
  - 41% of management roles in 2018 held by women
  - 36% of new U.S. hires in 2018 were members of underrepresented ethnic groups
  - 21% of U.S. executive roles in 2018 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