Merck
Q3 2020 Earnings
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 the 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).
Q3 performance highlights

Delivered worldwide sales growth

$12.6B

+2%

Strong non-GAAP EPS growth

$1.74

+18%

- Invested $2.3B in research and development, making significant progress in advancing our pipeline, as well as across our key growth pillars
- Returned $1.5 billion to shareholders through dividends
- Continued value-enhancing business development, including Seagen collaboration in Oncology, licensing agreement with Hanmi for NASH asset, and Animal Health acquisitions of IndentiGEN and VEXOCAN

- FDA granted priority review for 2 KEYTRUDA applications and one for Vericiguat, accepted a filing for KEYTRUDA, and granted breakthrough therapy designation for MK-6482
- Ex-US, received an approval and multiple CHMP positive opinions for Lynparza in Europe, and two new approvals for KEYTRUDA in Japan
- Presented data across our broad portfolio of assets at key medical meetings, including in HIV, oncology, and respiratory
- Toplined data from Phase 3 pneumococcal vaccine trials in adults
- Continued to progress COVID-19 research candidates

1. Growth rates exclude impact of foreign exchange
2. The GAAP to non-GAAP reconciliation is available in the Supplemental Tables to Merck’s Q3 2020 earnings release.
3. GAAP EPS $1.16
Driving value for patients and shareholders by progressing our pipeline

**Regulatory milestones**
- In the U.S., the FDA granted priority review for KN-355 in TNBC, KN-204\(^1\) in 2L cHL, and Vericiguat in chronic heart failure; accepted the filing for KN-522 in TNBC; and granted breakthrough designation to MK-6482 in VHL
- In the EU, received approval for Lynparza in pancreatic cancer (POLO), and positive CHMP opinions for Lynparza in ovarian cancer (PAOLA-1) and in prostate cancer (PROfound)
- In Japan, received approvals for KEYTRUDA in esophageal cancer and Q6W dosing regimen

**Data presentations & readouts**
- At ESMO, presented new data from KN-590, LEAP-004, LEAP-005, and PROfound, long-term survival data from KN-024, KN-054, KN-048 and SOLO-1, and new data from novel mechanisms, including vibostolimab (TIGIT), MK-4830 (ILT4) and MK-6482 (HIF2α)
- At ERS, presented data from the phase 3 COUGH-1 and COUGH-2 trials studying gefapixant in chronic cough
- Announced positive topline results from phase 3 trials studying V114, an investigational 15-valent PCV, in adults

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\(^1\) The FDA approved KN-204 in 2L cHL on October 15, 2020.
Collaboration with Ridgeback Bio to develop molnupiravir (MK-4482) an orally available antiviral candidate in development for the treatment of patients with COVID-19.

In preclinical studies, molnupiravir has shown antiviral activity against SARS-CoV-2, as well as the coronaviruses responsible for MERS and SARS. Results from a Phase 1 study suggest compound is well tolerated.

Merck has initiated two large pivotal Phase 2/3 trials studying molnupiravir:

- One anticipated to enroll ~1,450 non-hospitalized adult COVID-19 patients
- Another planned to enroll ~1,300 hospitalized adult COVID-19 patients

We have secured manufacturing capacity to produce millions of doses of molnupiravir before the end of the year.
### COVID-19 research efforts: advancing two promising vaccine programs

<table>
<thead>
<tr>
<th>Vaccine candidates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>V591</strong>&lt;br&gt;(measles virus vector)</td>
<td><strong>V590</strong>&lt;br&gt;(rVSV)</td>
</tr>
<tr>
<td>V591, a SARS-CoV-2 vaccine candidate that uses a measles virus vector platform, has entered Phase 1 development.</td>
<td>V590, a SARS-CoV-2 vaccine candidate that uses a recombinant vesicular stomatitis virus (rVSV) platform, will be entering Phase 1 development shortly.</td>
</tr>
<tr>
<td>Clinical trials are being conducted in Europe and the U.S. These studies will inform dose formulation and dosing regimen decisions for a large Phase 3 clinical trial.</td>
<td>rVSV is the basis for Merck’s Ebola Zaire virus vaccine, ERVEBO, which is the first rVSV vaccine approved for use in humans.</td>
</tr>
<tr>
<td>Acquisition of Themis to develop an investigational vaccine against SARS-CoV-2 using Themis’ innovative measles virus vector platform.</td>
<td>Collaborating with IAVI to develop investigational vaccine against SARS-CoV-2 using rVSV technology.</td>
</tr>
</tbody>
</table>
Oncology: continued strength across broad portfolio

- **KEYTRUDA** sales of $3.7B increased 21% year-over-year, reflecting continued leadership in lung and strong growth across the breadth of indications
  - In the U.S., sales of $2.2B driven by growth across all key tumor types, including continued growth and leadership in lung. Uptake of Q6W dosing regimen offset impact of the pandemic on new patient starts
  - 17% international growth, driven by global uptake in lung
- Strong growth from both Lynparza and Lenvima continues to bolster oncology portfolio with growth of 58% and 29%, respectively

1. All growth rates exclude the impact of foreign exchange.
Vaccines: wellness visits recovering but at extended pace

- Vaccines sales were flat year-over-year, reflecting strong recovery from Q2 but wellness visits still below normal levels, particularly in the U.S.
- GARDASIL sales of $1.2B decreased 10% year-over-year
  - In the U.S., sales declined year-over-year driven by a muted back to school season and change in public sector purchasing patterns
  - Ex-U.S., sales grew year-over-year, driven by strong volumes in China and the expansion of gender-neutral vaccinations in certain European countries, partially offset by reduced demand in Hong Kong
- PNEUMOVAX showed strong growth, +58% year-over-year, amidst heightened awareness of pneumococcal vaccination during the pandemic and ahead of flu season

1. All growth rates exclude the impact of foreign exchange.
Hospital: improved hospital access and elective procedure volumes drive strong recovery

- BRIDION sales of $320M increased 13% year-over-year driven by the recovery in elective surgical procedures and increased penetration of the reversal agent market.
- Ongoing launch of PREVYMIS drove 69% growth.
- Demonstrated commitment to the development of novel antibiotics and antivirals, with significant progress made on our COVID-19 antiviral candidate, molnupiravir (MK-4482), in collaboration with Ridgeback Bio.

1. All growth rates exclude the impact of foreign exchange.
Animal Health: strong growth across the portfolio

- Animal Health sales increased 12% to $1.2B
- Companion Animal sales increased 18%, reflecting underlying demand for the BRAVECTO line of products and companion animal vaccines
- Livestock sales increased 8%, reflecting growth in ruminants, poultry and swine as well as in technology products
- Year to date, our Animal Health business grew +12%, demonstrating strong resiliency in the challenging environment

1. All growth rates exclude the impact of foreign exchange.
Return to growth across most global markets

Global pharmaceutical sales +2%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.
Q3 2020 financial results summary: Delivering leverage in the P&L

$ in billions, except EPS amounts

<table>
<thead>
<tr>
<th></th>
<th>Q3 2020</th>
<th>Q3 2019</th>
<th>Change</th>
<th>Change Ex-FX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>$12.6</td>
<td>$12.4</td>
<td>+1%</td>
<td>+2%</td>
</tr>
<tr>
<td>GAAP Gross Margin</td>
<td>72.3%</td>
<td>67.8%</td>
<td>+5%</td>
<td>+5%</td>
</tr>
<tr>
<td>Non-GAAP Gross Margin</td>
<td>74.8%</td>
<td>75.9%</td>
<td>-1%</td>
<td>-1%</td>
</tr>
<tr>
<td>GAAP net income</td>
<td>$2.9</td>
<td>$1.9</td>
<td>+55%</td>
<td>+59%</td>
</tr>
<tr>
<td>Non-GAAP net income</td>
<td>$4.4</td>
<td>$3.9</td>
<td>+14%</td>
<td>+17%</td>
</tr>
<tr>
<td>that excludes certain items</td>
<td>$4.4</td>
<td>$3.9</td>
<td>+14%</td>
<td>+17%</td>
</tr>
<tr>
<td>GAAP EPS</td>
<td>$1.16</td>
<td>$0.74</td>
<td>+57%</td>
<td>+62%</td>
</tr>
<tr>
<td>Non-GAAP EPS</td>
<td>$1.74</td>
<td>$1.51</td>
<td>+16%</td>
<td>+18%</td>
</tr>
<tr>
<td>that excludes certain items</td>
<td>$1.74</td>
<td>$1.51</td>
<td>+16%</td>
<td>+18%</td>
</tr>
</tbody>
</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.
# Updated full-year 2020 guidance

<table>
<thead>
<tr>
<th></th>
<th>Prior Guidance</th>
<th>Updated Guidance</th>
<th>Key Assumptions</th>
</tr>
</thead>
</table>
| **Revenue**        | $47.2B - $48.7B                                     | $47.6B to $48.6B                                      | • Assumes ~1.5% negative FX impact  
|                    | +1% to +4% (+3% to +6% ex-FX)                        | +2% to +4% (+3% to +5% ex-FX)                          | • +8% to +10% ex-FX, ex-COVID                                                  |
| **Non-GAAP**       |                                                     |                                                       |                                                                                |
| Gross Margin Rate  | ~75.0%                                              | ~75.0%                                                | • No change                                                                     |
| Operating Expenses | Roughly flat                                        | Decrease by low single-digit                          | • Reduced spend driven by COVID-19 and expense management                      |
| Other (Income) / Expense | ~$550M of other income                             | ~$750M of other income                               | • Reflecting higher income from investments in equity securities              |
| Tax Rate           | 16.0% to 16.5%                                      | ~15.5%                                                | • Reflects favorable impact of earnings mix                                     |
| Shares Outstanding | ~2.54B                                              | ~2.54B                                                | • No change                                                                     |
| **GAAP EPS**       | $4.58 to $4.73                                      | $4.55 to $4.65                                        |                                                                                |
| **Non-GAAP EPS**   | $5.63 to $5.78                                      | $5.91 to $6.01                                        | • Assumes ~2.5% negative FX impact                                             |
|                    | +8% to +11% (+11% to +14% ex-FX)                     | +14% to +16% (+16% to +18% ex-FX)                     |                                                                                |

1. GAAP Gross Margin Rate: Higher than 2019
2. GAAP Operating Expenses: Lower than 2019 by a low-single-digit rate
3. GAAP Tax Rate: ~15.0%
4. The GAAP to non-GAAP reconciliation is available in Merck’s Q3 2020 earnings release
Balanced approach to capital allocation:
Investing in the business and creating value for shareholders

**Capital Investments**
2019 to 2023

~$20.0B
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**

- $9.0 billion invested in R&D ($7.5 billion after-tax)
- $6.3 billion spent on business development, including acquisitions and collaborations for 3 COVID-19 vaccine and antiviral candidates, strategic oncology collaboration with Seagen and Animal Health deals
- $8.3 billion in dividend and share repurchases
  - Remain committed to the dividend, which increased 11% in 2020
  - Returned $2.3 billion share repurchases (excluding option proceeds)
Merck has actively supplemented its pipeline and portfolio with strategic business development.

<table>
<thead>
<tr>
<th>Bolt-on acquisitions</th>
<th>Oncology</th>
<th>Cardiovascular, Neurosciences &amp; Other</th>
<th>Animal Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>AstraZeneca</td>
<td>ArQule</td>
<td>THEMIS</td>
<td>Allflex</td>
</tr>
<tr>
<td>Eisai</td>
<td>Peloton Therapeutics</td>
<td>Afferent</td>
<td>Vecoxan</td>
</tr>
<tr>
<td>Viralytics</td>
<td>Tiros Therapeutics</td>
<td>IMUNE DESIGN</td>
<td>SURE PETCARE</td>
</tr>
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<td>Immune Design</td>
<td>Calporta</td>
<td>calporta</td>
<td>HABRISVACCINES</td>
</tr>
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<td>Sutro Biopharma</td>
<td>BAYER</td>
<td>Iavi</td>
<td>IdentiGEN</td>
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<td>NGM Bio</td>
<td>Teijin</td>
<td>Teijin</td>
<td>VAKI</td>
</tr>
<tr>
<td>RIDGEBACK BIO</td>
<td>Hanmi</td>
<td>Hanmi</td>
<td>SCAN AQUA</td>
</tr>
<tr>
<td>Biocartis</td>
<td>SUTRO</td>
<td>SUTRO BIOPHARMA</td>
<td>QUANTIFIEDAG</td>
</tr>
<tr>
<td>Yumamni</td>
<td></td>
<td>Yumamni</td>
<td>Sentinel</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Biomark</td>
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</table>
Continued progress on the spinoff of Organon & Co.

Significant progress continues to be made on the spinoff of Organon & Co.

Continue to appoint talented and experienced leaders that will help drive Organon’s success as an independent company.

Remain confident in decision that two, more focused companies will drive stronger growth and unlock long-term value for patients and shareholders.

Spinoff of Organon & Co. expected to be completed in the second quarter 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
Continuing to make progress on our ESG commitments

**Access to Health**
- History of making medicines and vaccines accessible and affordable through responsible pricing practices
- Implemented refreshed Access to Health Guiding Principles to ensure we continue to fulfill our commitment to access by focusing on the most critical issues
- Reaching more than 11 million women worldwide through Merck for Mothers, a $500 million initiative
- Through our 30+ year old MECTIZAN® Donation Program, eliminated river blindness in 4 Latin American countries and in parts of 6 African countries so far, and eliminated lymphatic filariasis in 2 countries in Africa and the Middle East
- Thanks to the commitment of many collaborators across multiple sectors, ERVEBO, Merck’s vaccine for the prevention of disease caused by Zaire ebolavirus, is now approved in the United States, conditionally approved in the European Union, prequalified by the WHO, and registered in eight African countries (with additional African registrations pending review)

**Employees**
- Offering numerous programs to engage employees and promote positive work environment (including female mentorship by female Board members)
- Partnering with Year Up, a nonprofit that enables low-income young adults of color to move from minimum wage to meaningful careers in just one year
- Increase in 2019 in women on our Board (25%), in executive roles (36%), and in management roles (43%)
- Recognized as a 2020 best place to work for LGBTQ equality by the Human Rights Campaign (HRC) Foundation
- Identified by the American Indian Science and Engineering Society (AISES) as a 50 Top STEM Workplaces for Indigenous STEM Professionals

**Environmental Sustainability**
- Featuring energy-conservation and water-use-reduction initiatives
- Reducing environmental impacts as evidenced by an EPA Green Chemistry Challenge Award four years running (seven awards overall)
- Purchasing electricity from renewable energy sources to reduce greenhouse gas emissions, including the launch of our first large wind virtual power purchase agreement
- Collaborating with suppliers and customers to address shared needs and interests in environmentally beneficial ways

**Ethics and Transparency**
- 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 solutions that address the needs of patients
- Integrating the SDGs into our reporting to demonstrate our commitment to sustainable development

Increasing access to health to advance Merck’s efforts to serve more patients
- History of making medicines and vaccines accessible and affordable through responsible pricing practices
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Fostering diverse and gender-balanced workforce essential to performance as a research-intensive company and to attracting most talented scientists
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Executing an environmental sustainability strategy to take advantage of opportunities to reduce environmental impact across operations and supply chain
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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
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Please find our 2019/2020 Corporate Responsibility Report [here](#).