Agenda

Strategic and Business Update
Rob Davis
Chairman and Chief Executive Officer

Business/Financial Results and Outlook
Caroline Litchfield
Chief Financial Officer

Research Update
Dr. Dean Li
President, Merck Research Laboratories

Question & Answer Session
This presentation of Merck & Co., Inc., Rahway, 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 candidates that the candidates 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 Annual Report on Form 10-K for the year ended December 31, 2023 and the company’s other filings with the Securities and Exchange Commission (SEC) available at the SEC’s Internet site (www.sec.gov).
Strategy and Business Update

Rob Davis
Chairman and Chief Executive Officer
Delivered on our key strategic priorities in Q1 2024

- Advanced the pipeline to meet patient unmet need
- Executed on strategic business development to augment pipeline
- Achieved strong commercial and financial performance
- Created long-term value for patients and shareholders
Strong Q1 sales\(^1\) and earnings growth

### Q1 Worldwide Sales

- **$15.8B**
- +9%
- +12% ex-Exchange

### Q1 Non-GAAP EPS\(^3\)

- **$2.07**
- +48%

Includes one-time charge of $0.26 related to the Harpoon acquisition

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**Full Year Sales**

- **2022:** $59.3B (+22%)
- **2023:** $60.1B (+1%)
- **2024:** GUIDANCE RANGE $63.1B - $64.3B (+5% - +7%)

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**Full Year Non-GAAP EPS\(^2\)**

- **2022:** $7.48
- **2023:** $1.51
- **2024:** GUIDANCE RANGE $8.53 - $8.65

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1. Results from continuing operations attributable to Merck & Co., Inc. 2. Merck does not exclude expenses for upfront and milestone payments related to certain collaborations and licensing agreements, or charges related to pre-approval assets obtained in transactions accounted for as asset acquisitions from its non-GAAP results. First quarter of 2024 and 2023 include $0.26 and $0.52 per share of such charges, respectively. Full year non-GAAP outlook for 2024 and full year reported results for 2023 and 2022 include $0.26, $6.21 and $0.22 per share of such charges, respectively. 3. GAAP EPS $1.87.

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[Image of bar charts for sales and earnings growth]
Maximizing potential impact for patients with cutting-edge science

**Vaccines**

- **HPV & Pneumococcal**
  - Seeking to protect broad populations globally

**Infectious Disease**

- **HIV**
  - Progressing our clinical programs focused on the treatment and prevention of HIV

**Oncology**

- **Diverse Portfolio & Pipeline**
  - Expanding our impact to more patients with potential to improve outcomes
Positioned to deliver the next wave of important innovations

"Creating a sustainable innovation engine that, with continued clinical success, will lead to a more diversified portfolio of growth drivers over the next decade and beyond"
Business/Financial Results and Outlook

Caroline Litchfield
Chief Financial Officer
Strong Q1 worldwide sales growth

Merck

WORLDWIDE SALES¹,²

$15.8B

+9% growth
+12% ex-exchange³

Human Health

$14.0B

+10% growth
+13% ex-exchange³

Animal Health

$1.5B

+1% growth
+4% ex-exchange³

¹ Results attributable to Merck & Co., Inc. ² Worldwide Sales includes Other Revenue.
³ Updated May 6, 2024: ~2% of the negative impact of foreign exchange for Worldwide Sales and Human Health, and ~3% of the negative impact of foreign exchange for Animal Health, was due to devaluation of Argentine peso, which was largely offset by inflation-related price increases, consistent with practice in that market.
Oncology: KEYTRUDA continues to drive excellent growth

- KEYTRUDA sales of $6.9B increased 24%\(^1\) year-over-year, driven by uptake in earlier stage cancers and continued strong demand from metastatic indications
  - In the U.S., increase largely attributable to indications in earlier stage NSCLC following launches of KN-671 and KN-091, as well as strong uptake following launch of KN-A39 in advanced urothelial cancer
  - Ex-U.S. growth reflects continued uptake in earlier stage cancers, including high-risk early-stage TNBC and adjuvant RCC, as well as demand from metastatic indications

Growth rates exclude the impact of foreign exchange.
1. ~4% of the negative impact of foreign exchange was due to devaluation of Argentine peso, which was largely offset by inflation-related price increases, consistent with practice in that market.
Oncology: Strong performance across broad portfolio

- Lynparza\(^1\) sales grew 7%, driven primarily by higher demand in certain international markets.

- Lenvima\(^2\) sales grew 10%, driven primarily by higher demand in the U.S.

- WELIREG sales more than doubled, driven by the approval of LITESPARK-005 for certain patients with previously treated advanced RCC, as well as increased uptake in VHL disease-associated tumors.

\(^1\) In collaboration with AstraZeneca  \(^2\) In collaboration with Eisai

Growth rates exclude the impact of foreign exchange.

1Q22 1Q23 1Q24

- Lynparza: $266M +20%  $275M +8%  $292M +7%
- Lenvima: $227M +77%  $232M +5%  $255M +10%
- WELIREG: $18M +128%  $42M +102%  $85M +102%
Vaccines: Robust growth driven by GARDASIL

• GARDASIL sales of $2.2B increased 17% year-over-year driven by global demand
  – Sales benefited from timing of shipments in China and CDC purchasing patterns in the U.S.

• VAXNEUVANCE grew to $219M, driven by continued uptake of pediatric indication in the U.S. and ongoing launches in Europe
  – Sales benefited from CDC purchasing patterns in the U.S.

Growth rates exclude the impact of foreign exchange.
Animal Health: Growth across livestock and companion animal

- Animal Health sales increased 4%\(^1\) to $1.5B
  - Livestock sales growth was driven by price actions, as well as demand for swine and poultry products, partially offset by lower demand for ruminants products
  - Companion Animal growth reflects price actions

Growth rates exclude the impact of foreign exchange.
1. Updated May 6, 2024: ~3% of the negative impact of foreign exchange was due to devaluation of Argentine peso, which was largely offset by inflation-related price increases, consistent with practice in that market.
## Q1 2024 non-GAAP financial results summary

$ in billions, except EPS amounts

<table>
<thead>
<tr>
<th></th>
<th>Q1 2024</th>
<th>Q1 2023</th>
<th>Change</th>
<th>Change Ex-FX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>$15.8</td>
<td>$14.5</td>
<td>+9%</td>
<td>+12%</td>
</tr>
<tr>
<td><strong>Non-GAAP Gross Margin</strong></td>
<td>81.2%</td>
<td>76.9%</td>
<td>+4.3pts</td>
<td>+3.8pts</td>
</tr>
<tr>
<td><strong>Non-GAAP Operating Expenses</strong></td>
<td>$6.4</td>
<td>$6.7</td>
<td>-4%</td>
<td>-3%</td>
</tr>
<tr>
<td><strong>Non-GAAP Tax Rate</strong></td>
<td>16.1%</td>
<td>20.4%</td>
<td>-4.3pts</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Non-GAAP EPS</strong>²,³</td>
<td>$2.07</td>
<td>$1.40</td>
<td>+48%</td>
<td>+54%</td>
</tr>
</tbody>
</table>

1. Merck is providing certain 2023 and 2022 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 because management uses non-GAAP results to assess performance. Management uses non-GAAP measures internally for planning and forecasting purposes and to measure the performance of the company along with other metrics. In addition, annual employee compensation, including senior management’s compensation, is derived in part using a non-GAAP pretax income metric. 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 non-GAAP adjustments, see Table 2a attached to the earnings release.  
2. Q1 2024 includes $656 million charge, or $0.26 negative EPS impact, for the acquisition of Harpoon. Q1 2023 includes charges of $1.4 billion, or $0.52 negative EPS impact, for the acquisition of Imago and collaboration agreement with Kelun-Biotech.  
3. Q1 2024 GAAP EPS of $1.87.
## Updated 2024 financial outlook

<table>
<thead>
<tr>
<th></th>
<th>Prior Guidance</th>
<th>Updated Guidance</th>
<th>Key Assumptions</th>
</tr>
</thead>
</table>
| **Revenue**            | $62.7B to $64.2B     | $63.1B to $64.3B       | - Assumes ~3% FX headwind (previously ~2%)  
                        |                      |                        | - Implies growth of 5% to 7% (previously 4% to 7%)                               |
| **Non-GAAP Gross Margin Rate** | ~80.5%              | ~81.0%                 | - Includes the benefit from reduced royalties paid on KEYTRUDA and GARDASIL² |
| **Non-GAAP Operating Expenses¹** | $25.1B to $26.1B  | $25.2B to $26.1B       | - Includes $656M one-time charge related to the acquisition of Harpoon Therapeutics |
| **Other (Income) / Expense** | ~$200M of expense  | ~$250M of expense      |                                                                                |
| **Tax Rate**           | ~14.5% to 15.5%      | ~14.5% to 15.5%        |                                                                                |
| **Shares Outstanding** | ~2.54B               | ~2.55B                 | - Assumes modest share repurchase                                               |
| **Non-GAAP EPS**       | $8.44 to $8.59       | $8.53 to $8.65         | - Includes one-time ~$0.26 charge related to Harpoon Therapeutics  
                        |                      |                        | - Assumes an incremental $0.05 FX headwind  
                        |                      |                        | - Assumes full year ~$0.30 FX headwind    |

¹ Guidance does not assume any additional significant potential business development transactions.  
² One royalty on KEYTRUDA stepped down from 6.5% to 2.5% on 1/1/2024; One royalty on GARDASIL of 7% expired on 1/1/2024.
Key modeling considerations

**KEYTRUDA**
• Increased sales guidance reflects continued growth from additional indications and patient demand

**GARDASIL**
• Expect more evenly distributed quarterly shipments to China this year, which will adversely impact Q2 2024 ex-U.S. growth

**LAGEVRIO**
• Sales in Q1 2024 were driven by COVID-19 incidence in Asia-Pacific markets, and continue to anticipate lower sales than 2023
WINREVAIR: Excited to bring a novel treatment option to adult patients with PAH

• Confident in successful launch of WINREVAIR, consistent with prior expectations

• Encouraged by high interest from patient groups and a range of relevant prescribers

• Several payers have already established coverage policies, while others are in the process of developing their policies

• Intend to provide appropriate insights to track progress, including prescription data and revenue
Remain committed to balanced capital allocation strategy

Q1 Spend ($ in billions)

Capital allocation order of priority

- After-Tax R&D: $2.8
- CapEx: $0.9
- Dividends Paid: $2.0
- Business Development (ex-divestitures): $1.1
- Share Repurchase: $0.1

Continue to invest in the **pipeline** and **business** while augmenting the pipeline with value-enhancing **business development**

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1. Reflects R&D excluding Business Development
Research Update

Dr. Dean Li
President, Merck Research Laboratories
Expanding the treatment landscape for patients with Pulmonary Arterial Hypertension

WINREVAIR (sotatercept-csrk)

- Received FDA approval for WINREVAIR for treatment of adults with PAH
- Currently under review by EMA with decision expected in 2H 2024
- Phase 3 ZENITH and HYPERION studies ongoing, as well as Phase 2 CADENCE study
Progress across our HIV clinical program

Recent Data at CROI\(^1\)

- In collaboration with Gilead, presented positive safety and efficacy findings from Phase 2 study evaluating a once-weekly oral combination of islatravir and lenacapavir for treatment of adults living with HIV
- Presented safety and tolerability data for MK-8527 from two Phase 1 trials evaluating ascending single dose and multiple doses for prophylaxis of adults 18 to 55 years old not infected with HIV

1. Conference on Retroviruses and Opportunistic Infections
Important updates across our vaccines programs

**V116**

- Presented positive data from **multiple Phase 3 trials** at ISPPD\(^1\) in March
- Potential to be first approved pneumococcal conjugate vaccine specifically designed to address the **majority of serotypes** that cause **invasive pneumococcal disease** for individuals 65\(^+\)\(^2\)
- **PDUFA** set for June 17\(^{th}\), followed by **ACIP meeting**

**HPV Vaccines**

- Announced **new clinical program** to identify a **novel multi-valent HPV vaccine candidate**
- Plan to **initiate clinical trials** evaluating short and long-term efficacy of **single-dose GARDASIL 9** versus three-dose regimen

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1. International Society of Pneumonia & Pneumococcal Diseases  
2. According to CDC data from 2018-2021
Diversifying our oncology program and executing on our strategy

**Immuno-oncology**
- Boost anti-tumor immune responses

**Precision Molecular Targeting**
- Impact pathways that can drive cancer growth

**Tissue Targeting**
- Increase cancer cell sensitivity with ADCs and immune-engagers
Committed to harnessing the power of immuno-oncology

**Immuno-oncology**

- **KEYNOTE-A18**: Met primary endpoint of **OS** for treatment of newly diagnosed patients with high-risk locally advanced **cervical cancer**
- **KEYNOTE-868**: FDA granted **priority review** for 1L treatment of patients with primary advanced or recurrent **endometrial carcinoma** (PDUFA June 21st)
- **KEYNOTE-671**: European Commission approved **KEYTRUDA perioperative treatment regimen** for certain adult patients with resectable **NSCLC** at high risk of recurrence
Substantial progress across precision and tissue targeting

Precision Molecular Targeting

• Initiated Phase 3 trial for MK-1084, an investigational KRAS G12C inhibitor, in combination with KEYTRUDA for treatment of certain patients with metastatic NSCLC

Tissue Targeting

• Initiated Phase 2 / 3 REJOICE-Ovarian01 trial evaluating MK-5909\(^1\) for treatment of patients with platinum-resistant ovarian cancer
• Poised to initiate Phase 3 trial evaluating MK-2400\(^1\) for treatment of certain patients with SCLC
• Completed acquisition of Harpoon Therapeutics, with lead candidate MK-6070, a T-cell engager targeting (DLL3) being evaluated in certain patients with SCLC and neuroendocrine tumors

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1. In collaboration with Daiichi Sankyo
Key upcoming dates

Save the Date:
ASCO Investor Event in Chicago

Upcoming U.S. Regulatory Action Dates:

June 17th
**V116** for prevention of invasive pneumococcal disease and pneumococcal pneumonia in adults

June 21st
**KEYTRUDA** for primary advanced or recurrent endometrial carcinoma (KEYNOTE-868)

June 26th
**MK-1022**\(^1\) for advanced EGFRm NSCLC (HERTHENA-Lung01)

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1. In collaboration with Daiichi Sankyo.
Q&A

Rob Davis  
Chairman & Chief Executive Officer

Caroline Litchfield  
Chief Financial Officer

Dr. Dean Li  
President, Merck Research Laboratories

Peter Dannenbaum  
Senior Vice President, Investor Relations
Appendix
Q1 2024 GAAP financial results summary

$ in billions, EPS amounts

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<td>$6.8</td>
<td>-4%</td>
<td>-3%</td>
</tr>
<tr>
<td>Tax Rate</td>
<td>15.9%</td>
<td>22.6%</td>
<td>-6.7pts</td>
<td>N/A</td>
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<tr>
<td>GAAP EPS</td>
<td>$1.87</td>
<td>$1.11</td>
<td>+68%</td>
<td>+76%</td>
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</tbody>
</table>
Capital allocation: Trailing twelve months

Over the past 12 months

<table>
<thead>
<tr>
<th>Billions</th>
<th>After-Tax R&amp;D</th>
<th>CapEx</th>
<th>Dividends Paid</th>
<th>Business Development (ex-divestitures)</th>
<th>Share Repurchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>$11.0</td>
<td>$3.7</td>
<td>$7.5</td>
<td></td>
<td>$17.7</td>
<td>$1.3</td>
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</tbody>
</table>

Order of priority

Capital investments
2023 to 2027

~$18B

Over 5 years, including expanding manufacturing capacity for Oncology, Vaccines, and Animal Health. Includes >$10B in the U.S.

Well-positioned balance sheet with capacity to fund additional value-enhancing business development opportunities

Commitment to the dividend

Dollars per share

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>$1.80</td>
<td>$1.84</td>
<td>$1.88</td>
<td>$1.92</td>
<td>$2.00</td>
<td>$2.44</td>
<td>$2.60</td>
<td>$2.76</td>
<td>$2.92</td>
<td>$3.08</td>
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</tbody>
</table>

+2%  +2%  +2%  +15% +11% +7%  +6%  +6%  +5%  

1. Reflects R&D excluding Business Development
2. Includes BD payments reflected in operating cash flow
Driving value for patients and shareholders by progressing our pipeline

Key regulatory milestones since the last earnings call:

- **In the U.S.**:
  - FDA accepted for priority review the sBLA for KEYTRUDA in combination with chemotherapy, followed by KEYTRUDA as a single agent for the treatment of patients with primary advanced or recurrent endometrial carcinoma based on NRG-GY018 (KEYNOTE-868)
  - FDA approved WINREVAIR for the treatment of adults with pulmonary arterial hypertension based on STELLAR

- **In the EU**:
  - EC approved KEYTRUDA as part of a treatment regimen in the perioperative setting for the treatment of certain patients with resectable NSCLC at high risk of recurrence based on KEYNOTE-671

Key data & clinical advancements since the last earnings call:

- Presented positive data from multiple Phase 3 studies evaluating V116, an investigational 21-valent pneumococcal conjugate vaccine for adults, at the International Society of Pneumonia and Pneumococcal Diseases
- Presented results from the Phase 2 study evaluating islatravir, an investigational nucleoside reverse transcriptase translocation inhibitor, and lenacapavir, a first-in-class capsid inhibitor, in the treatment of patients with HIV at the Conference on Retroviruses and Opportunistic Infections
- Announced Phase 3 KEYNOTE-A181 trial evaluating KEYTRUDA in combination with chemoradiotherapy met its primary endpoint of overall survival for the treatment of newly diagnosed patients with high-risk locally advanced cervical cancer
- Announced plans to initiate clinical development of a new investigational multi-valent HPV vaccine and to conduct clinical trials evaluating whether a single-dose regimen of GARDASIL 9 provides comparable long-term protection to the approved three-dose regimen at the EUROGIN 2024 HPV Congress
- Initiated Phase 3 trial evaluating MK-1084, an investigational oral selective KRAS G12C inhibitor, for the treatment of certain patients with metastatic NSCLC
- Initiated Phase 2/3 REJOICE-Ovarian01 trial evaluating raludotatug deruxtecan (R-DXd) for the treatment of patients with platinum-resistant ovarian cancer
<table>
<thead>
<tr>
<th>Phase 2</th>
<th>Phase 3</th>
<th>Under regulatory review</th>
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<tbody>
<tr>
<td><strong>Oncology</strong></td>
<td><strong>Oncology</strong></td>
<td><strong>Oncology</strong></td>
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<tr>
<td>MK-1022 (patritumab deruxtecan)</td>
<td>MK-1022 (patritumab deruxtecan)</td>
<td>KEYTRUDA (MK-3475)</td>
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<tr>
<td>Gastric</td>
<td>-</td>
<td>Resectable NSCLC (JPN)</td>
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<tr>
<td>Melanoma</td>
<td>Hematological Malignancies</td>
<td>1L Urothelial (EU, JPN)</td>
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<tr>
<td>MK-1308 (quavonlimab)</td>
<td>MK-1026 (nematrubinin)</td>
<td>1L HER2- Gastric (JPN)</td>
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<tr>
<td>NSCLC</td>
<td>Hematological Malignancies</td>
<td>1L Biliary (JPN)</td>
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<tr>
<td>MK-1308A (quavonlimab + pembrolizumab)</td>
<td>MK-1308A (quavonlimab + pembrolizumab)</td>
<td>Endometrial Carcinoma (US, EU, JPN)</td>
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<td>CRC</td>
<td>Hematological Malignancies</td>
<td>Cervical (EU, JPN)</td>
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<td>MK-2140 (iflatamab vedotin)</td>
<td>Gene therapy for VHL tumors (EU)</td>
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<tr>
<td>Hematological Malignancies</td>
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<td>Advanced RCC (EU)</td>
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<tr>
<td>MK-2400 (iflatamab vedotin)</td>
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<td>Certain VHL tumors (EU)</td>
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<td>Advanced RCC (EU)</td>
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<tr>
<td>SCLC</td>
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<td>Cardiometabolic</td>
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</tbody>
</table>

**Vaccines**

**Infectious disease**

**Cardiometabolic**

**Neuroscience**

**V16**

Pneumococcal conjugate vaccine, adult (US, EU)

1 Available in the US under EUA 2 Development is co-funded by Royalty Pharma 3 FDA issued CRL in December 2023 4 On FDA clinical hold 5 On FDA partial clinical hold for higher doses than those used in current clinical trials 6 In collaboration with Daiichi Sankyo 7 In collaboration with Kelun Biotech 8 In collaboration with AstraZeneca 9 In collaboration with Eli Lilly 10 Developed under an agreement with Ridgeback Bio 11 In collaboration with Orion 12 In collaboration with Moderna 13 In collaboration with Glaxo 14 In collaboration with Kerlan-Boitich 15 In collaboration with Almirall 16 In collaboration with Merck 17 In collaboration with Debiopharm 18 In collaboration with SDP 19 In collaboration with Gilead 20 In collaboration with Gilead 21 In collaboration with Moderna 22 In collaboration with Glaxo 23 In collaboration with Eli Lilly 24 In collaboration with Janssen

**Broad and innovative pipeline to address significant unmet medical needs**

As of April 25, 2024