

MSD Pipeline

Q4 2023 Reflecting Pipeline to November 1, 2023

Lead-in language

The chart below reflects the company's research pipeline as of **November 1, 2023**. Candidates shown in Phase 3 include specific products and the date such candidate entered into Phase 3 development. Candidates shown in Phase 2 include the most advanced compound with a specific mechanism or, if listed compounds have the same mechanism, they are each currently intended for commercialization in a given therapeutic area. Small molecules and biologics are given MK-number designations and vaccine candidates are given V-number designations. Except as otherwise noted, candidates in Phase 1, additional indications in the same therapeutic area (other than with respect to cancer and certain other indications) and additional claims, line extensions or formulations for in-line products are not shown.



Being developed in a collaboration. 1.

- 2.
- Being developed in combination with Keytruda Being developed as monotherapy and/or in combination with Keytruda 3.

Moved forward since last pipeline update.

| Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
|---|---|---|--|--|
| Cancer NSCLC quavonlimab MK-1308 ² | Cancer CRC SCLC quavonlimab + pembrolizumab MK-1308A | Thrombosis MK-2060 | Cancer Bladder Breast Gastric Heme NSCLC Ovarian Pancreas zilovertamab vedotin MK-2140 | Cancer SCLC ifinatamab deruxtecan MK-2400 ¹ |
| Cancer Neoplasm Malignant MK-2870^{1, 3} | Cancer Advanced solid tumors Prostate KEYTRUDA® MK-3475 | Cancer Cutaneous Squamous Cell Carcinoma pembrolizumab + hyaluronidase subcutaneous MK-3475A | Cancer Myeloproliferative Disorders bomedemstat MK-3543 | Cancer NSCLC favezelimab MK-4280² |
| Cancer Bladder Cutaneous Squamous Cell Carcinoma Esophageal Melanoma RCC SCLC favezelimab + pembrolizumab MK-4280A | Cancer CRC Esophageal Melanoma NSCLC Ovarian RCC SCLC MK-4830 ² | Pulmonary Arterial Hypertension MK-5475 | Cancer Prostate MK-5684 ¹ | Cancer NSCLC SCLC boserolimab MK-5890 ² |



- Being developed in a collaboration. 1.
- 2.
- Being developed in combination with Keytruda Being developed as monotherapy and/or in combination with Keytruda 3.
- On FDA clinical hold 4.
- On partial clinical hold for higher doses than those used in current 5. clinical trials

Phase 2b development costs are being co-funded 6.

Moved forward since last pipeline update.

| Phase 2 | Phase 2 | Phase 2 | Phase 2 | Phase 2 |
|--|---|---|--|---|
| NASH efinopegdutide MK-6024 | Cancer Biliary CRC Endometrial Esophageal HCC Pancreatic Rare cancers Certain VHL tumors (EU) WELIREG™ MK-6482 ³ | Cancer Advanced Solid Tumors Biliary Bladder Cervical Endometrial Gastric NSCLC TUKYSA® MK-7119 ¹ | Cancer Advanced solid tumors LYNPARZA [®] MK-7339 ^{1,3} | Cancer Biliary Bladder Breast Cervical CRC Endometrial Esophageal Gastric HNSCC HCC Ovarian Prostate vibostolimab + pembrolizumal MK-7684A |
| Cancer Biliary HNSCC Pancreas Prostate SCLC LENVIMA® MK-7902 ^{1,2} | Pulmonary Hypertension due to Left Heart Disease sotatercept MK-7962 | Schizophrenia MK-8189 ⁶ | HIV-1 Infection islatravir+MK-8507 MK-8591B⁴ | HIV-1 Infection islatravir+lenacapavir MK-8591D ^{1,5} |

MSD pipeline as of November 1, 2023

Dengue fever virus Vaccine V181



- 1. Being developed in a collaboration.
- 2. Being developed in combination with Keytruda
- 3. Being developed as monotherapy and/or in combination with Keytruda
- 4. On partial clinical hold for higher doses than those used in current clinical trials
- 5. Available in the U.S. under Emergency Use Authorization
 - Moved forward since last pipeline update.

| | Phase 3 | Phase 3 | Phase 3 | Phase 3 |
|---|--|---|---|---|
| • | Hypercholesterolemia MK-0616 | Cancer NSCLC patritumab deruxtecan MK-1022¹ | Cancer Heme nemtabrutinib MK-1026 | Cancer RCC quavonlimab + pembrolizumab MK-1308A |
| | Respiratory syncytial virus clesrovimab MK-1654 | Cancer Cutaneous Squamous Cell Carcinoma (EU) Hepatocellular (EU) Mesothelioma Ovarian SCLC KEYTRUDA® MK-3475 | Cancer NSCLC pembrolizumab + hyaluronidase subcutaneous MK-3475A | Cancer CRC Heme favezelimab + pembrolizumab MK-4280A |
| | Anti-Viral COVID-19 molnupiravir MK-4482^{1, 5} (US) | Cancer RCC (EU) WELIREG™ MK-6482 ³ | Cancer Breast CRC TUKYSA® MK-7119 ¹ | Ulcerative Colitis MK-7240 |
| | Cancer NSCLC SCLC LYNPARZA® MK-7339 ² | Cancer Melanoma NSCLC SCLC vibostolimab + pembrolizumab MK-7684A | Cancer Esophageal Gastric LENVIMA® MK-7902 ^{1,2} | Pulmonary Arterial Hypertension sotatercept MK-7962 (EU) |
| | HIV-1 infection doravirine + islatravir MK-8591A ⁴ | Pneumococcal Vaccine Adult V116 | Cancer Melanoma V940 ^{1, 2} | |



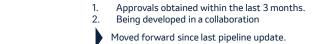
1. Being developed in a collaboration

 In July 2023, the FDA accepted Merck's resubmission of the NDA for gefapixant following the Company's response to the CRL received in January 2022.

Moved forward since last pipeline update.

| New Molecular Entities Under Review | Certain Supplemental Filings Under Review | Certain Supplemental Filings Under Review | Certain Supplemental Filings Under Review | Certain Supplemental Filings Under Review |
|---|---|--|---|---|
| Cough gefapixant MK-7264 (US ²) | 1L Locally Advanced Unresectable or Metastatic Biliary Tract Cancer (KN966) KEYTRUDA® MK-3475 (EU, JPN) | Newly Diagnosed High- Risk Locally Advanced Cervical Cancer (KNA18) KEYTRUDA® MK-3475 (US) | 1L HER2 negative Locally Advanced Unresectable or Metastatic Gastric Cancer (KN859) KEYTRUDA® MK-3475 (US, EU, JPN) | 2L Hepatocellular Cancer (KN394) KEYTRUDA® MK-3475 (US) |
| Pulmonary Arterial Hypertension (STELLAR) sotatercept MK-7962 (US) | Resectable Stage II, IIIA or IIIB NSCLC (KN671) KEYTRUDA® MK-3475 (EU, JPN) | Previously Treated Advanced Renal Cell Carcinoma (LIGHTSPARK-005) WELIREG® MK-6482 (US) | Prophylaxis of CMW in kidney transplant patients PREVYMIS™ MK-8228 (EU) | |





| New Molecular Entities Approvals ¹ | Certain Supplemental Approvals ¹ | Certain Supplemental Approvals ¹ | Certain Supplemental Approvals ¹ |
|--|--|---|--|
| Cough gefapixant MK-7264 (EU) | 1L Locally Advanced Unresectable or Metastatic Biliary Tract Cancer (KN966) KEYTRUDA® MK-3475 (US) | Metastatic HER2+ Gastric Cancer (KN811) KEYTRUDA® MK-3475 (EU) | Advanced MSI-H/dMMR Solid Tumors (KN158) KEYTRUDA® MK-3475 (CHN) |
| | Resectable Stage II, IIIA or IIIB NSCLC (KN671) KEYTRUDA® MK-3475 (US) | Adjuvant NSCLC (KN091) KEYTRUDA® MK-3475 (EU) | Locally Advanced or Metastic Merkel Cell Carcinoma (KN913) KEYTRUDA® MK-3475 (US) |
| | Metastatic 1L prostate cancer (PROpel) LYNPARZA® MK-7339 ¹ (JPN) | | |

Forward-looking statement

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 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 Annual Report on Form 10-K for the year ended December 31, 2022 and the company's other filings with the Securities and Exchange Commission (SEC) available at the SEC's Internet site (www.sec.gov).



The information contained in the presentation set forth below was current as of November 1, 2023. While this presentation remains on the company's website the company assumes no duty to update the information to reflect subsequent developments. Consequently, the company will not update the information contained in the presentation and investors should not rely upon the information as current or accurate after November 1, 2023.

The chart reflects the Merck research pipeline as of November 1, 2023.

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