MERCK
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Merck 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.

1. Being developed in a collaboration.
2. Being developed in combination with Keytruda
3. Being developed as monotherapy and/or in combination with Keytruda

▶ Moved forward since last pipeline update.

Merck pipeline as of November 1, 2023

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-4280**[2]
▶ 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]

Merck pipeline as of November 1, 2023

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 FDA clinical hold
5. On partial clinical hold for higher doses than those used in current clinical trials
6. Phase 2b development costs are being co-funded

▶ 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 + pembrolizumab **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-8591B** [4]	HIV-1 Infection islatravir+lenacapavir **MK-8591D** [1,5]
Dengue fever virus Vaccine **V181**				

Merck pipeline as of November 1, 2023

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-1022**[1]	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
2. 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.

Merck pipeline as of November 1, 2023

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)**	

1. Approvals obtained within the last 3 months.
2. Being developed in a collaboration

▶ Moved forward since last pipeline update.

Merck pipeline as of November 1, 2023

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).

No duty to update

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.

Candidates shown in Phase 3 include specific products. Candidates shown in Phase 2 include the most advanced compound with a specific mechanism in a given therapeutic area. Phase 1 candidates are not shown.