



MSD Pipeline

Q2 2023 Reflecting Pipeline to
May 3, 2023

Lead-in language

The chart below reflects the company's research pipeline as of **May 3, 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.

MSD pipeline as of May 3, 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

▶ Moved forward since last pipeline update.

Phase 2	Phase 2	Phase 2	Phase 2	Phase 2
Cancer NSCLC MK-0482 ²	Hypercholesterolemia MK-0616	Cancer NSCLC quavonlimab MK-1308 ²	Cancer CRC Hepatocellular Melanoma SCLC quavonlimab + pembrolizumab MK-1308A	Treatment Resistant Depression MK-1942
Thrombosis MK-2060	Cancer Bladder Breast Gastric Heme NSCLC Ovarian Pancreas zilovertamab vedotin MK-2140	Cancer Neoplasm Malignant MK-2870 ^{1,3}	Cancer Advanced solid tumors Prostate KEYTRUDA® MK-3475	Cancer Myeloproliferative Disorders bomedemstat MK-3543
Cancer NSCLC favezelimab MK-4280 ²	Cancer Bladder 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

MSD pipeline as of May 3, 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
<p>Cancer NSCLC SCLC boserolimab MK-5890²</p>	<p>NASH efinopegdutide MK-6024</p>	<p>Cancer Breast Esophageal Gastric HNSCC Melanoma NSCLC Prostate SCLC ladiratuzumab vedotin MK-6440^{1,3}</p>	<p>Cancer Biliary CRC Endometrial Esophageal HCC Pancreatic Rare cancers Certain VHL tumors (EU) WELIREGTM MK-6482³</p>	<p>Cancer Advanced Solid Tumors Biliary Bladder Cervical Endometrial Gastric NSCLC TUKYSA[®] MK-7119¹</p>
<p>Cancer Advanced solid tumors LYNPARZA[®] MK-7339^{1,3}</p>	<p>Cancer Biliary Bladder Breast Cervical CRC Endometrial Esophageal Gastric Heme HNSCC HCC Ovarian Prostate vibostolimab + pembrolizumab MK-7684A</p>	<p>Cancer Biliary Melanoma Pancreas Prostate SCLC LENVIMA[®] MK-7902^{1,2}</p>	<p>Pulmonary Hypertension due to Left Heart Disease sotatercept MK-7962</p>	<p>Schizophrenia MK-8189⁶</p>
<p>HIV-1 Infection islatravir+MK-8507 MK-8591B⁴</p>	<p>HIV-1 Infection islatravir+lenacapavir MK-8591D^{1,5}</p>	<p>Dengue fever virus Vaccine V181</p>	<p>Cancer Melanoma V940^{1,2}</p>	

MSD pipeline as of May 3, 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. Available in the U.S. under Emergency Use Authorization
- ▶ Moved forward since last pipeline update.

Phase 3	Phase 3	Phase 3	Phase 3
▶ Cancer Heme nemtabrutinib MK-1026	Cancer RCC quavonlimab + pembrolizumab MK-1308A	Respiratory syncytial virus clesrovimab MK-1654	Cancer NSCLC pembrolizumab subcutaneous MK-3475
Cancer Biliary tract 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^{1,6} (US)
Cancer RCC WELIREG™ MK-6482³	Cancer Breast CRC TUKYSA® MK-7119¹	Cancer NSCLC SCLC LYNPARZA® MK-7339^{1,2}	Cancer Melanoma NSCLC SCLC vibostolimab + pembrolizumab MK-7684A
Cancer Esophageal Gastric HNSCC NSCLC LENVIMA® MK-7902^{1,2}	Pulmonary Arterial Hypertension sotatercept MK-7962	HIV-1 infection doravirine + islatravir MK-8591A⁵	Pneumococcal Vaccine Adult V116

MSD pipeline as of May 3, 2023

1. Approvals obtained within the last 3 months.
2. Being developed in a collaboration
3. In response to the CRL received Jan 2022, MSD is performing additional analyses and anticipates submitting this information to the FDA in the first half of 2023.
4. Requested re-examination of EU MAA following CHMP major objection of data to support market authorization

▶ 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
<p>Anti-Viral COVID-19 molnupiravir MK-4482^{2,4} (EU)</p>	<p>Relapsed or refractory Primary Mediastinal B-Cell Lymphoma (KN170/KNA33) KEYTRUDA® MK-3475 (JPN)</p>	<p>2L hepatocellular cancer (KN394) KEYTRUDA® MK-3475 (US)</p>	<p>Locally Advanced or Metastatic Merkel Cell Carcinoma (KN913) KEYTRUDA® MK-3475 (US)</p>
<p>Cough gefapixant MK-7264 (US³, EU)</p>	<p>▶ 1L HER2 negative Locally Advanced Unresectable or Metastatic Gastric Cancer (KN859) KEYTRUDA® MK-3475 (US, EU)</p>	<p>Adjuvant NSCLC (KN091) KEYTRUDA® MK-3475 (EU)</p>	<p>▶ Resectable Stage II, IIIA or IIIB NSCLC (KN671) KEYTRUDA® MK-3475 (US, EU)</p>
	<p>Metastatic 1L prostate cancer (PROpel) LYNPARZA® MK-7339² (US, JPN)</p>	<p>Prophylaxis of CMW in kidney transplant patients PREVYMIS™ MK-8228 (US)</p>	<p>Pneumococcal Infection for pediatric use VAXNEUVANCE™ V114 (JPN)</p>

MSD pipeline as of May 3, 2023

1. Approvals obtained within the last 3 months. .

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Certain Supplemental Approvals¹

▶ 1L Locally Advanced or Metastatic Urothelial Cancer (KN869)
KEYTRUDA®
MK-3475
(US)

▶ HPV Vaccine 2-dose Girls (9-14yrs.)
GARDASIL9®
V503
(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 May 3, 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 May 3, 2023.

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