

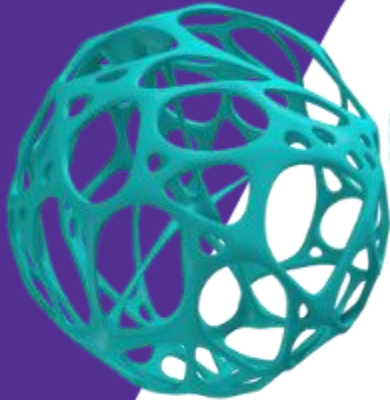


# EMD SERONO

**EMD  
SERONO**

EMD Serono is the  
biopharmaceutical business of  
Merck KGaA, Darmstadt,  
Germany

# WHO WE are



**We are EMD Serono, the biopharmaceutical business of Merck KGaA, Darmstadt, Germany, in the U.S. and Canada**

## **Making a Bold Difference**

We are committed to transforming lives by discovering, researching and delivering meaningful therapies for people with difficult-to-treat diseases.

## **Our Curiosity Drives Innovation**

Our approximately 1,500 employees are empowered by science and committed to providing valuable medicines, drug-delivery devices and support services.

## **Imagining the Future**

Building on a proven legacy and deep expertise in neurology and immunology, oncology, fertility and endocrinology, we have a strong pipeline with more than 20 projects in development.



# rooted in HISTORY

Can you imagine a place where curiosity, passion and collaboration can change patients' lives?

**We can.**

With a history of vibrant science and technology that advanced the treatment of illnesses like multiple sclerosis (MS), infertility and cancer, we're bold in our approach and dedicated to improving lives.

We have been driving human progress for more than **350 years** through our global roots with **Merck KGaA, Darmstadt, Germany**, and more than 40 years in the U.S. at our corporate headquarters in Rockland, MA and the Research & Development (R&D) hub in Billerica, MA.





**MAKING A  
BOLD  
DIFFERENCE  
FOR PATIENTS**

# Committed to Providing Valuable Solutions in Oncology, Neurology & Immunology, Fertility and Endocrinology

**Rebif**<sup>®</sup>  
(interferon beta-1a)  
subcutaneous injection



**Rebif**  
**Rebidose**<sup>®</sup>  
(interferon beta-1a) subcutaneous injection



**BAVENCIO**<sup>®</sup>  
avelumab injection  
20 mg/mL

**GONAL-f**<sup>®</sup>  
(hCG injection)



**GONAL-f FFF Redi-ject**<sup>®</sup>  
(hCG injection)

**Serostim**<sup>®</sup>  
(somatropin) for injection

**saizen**<sup>®</sup>  
(somatropin) for injection

**MAVENCLAD**<sup>™</sup>  
(cladribine) tablets 10 mg

Please see MAVENCLAD full Prescribing Information, including **boxed WARNING**.

**Cetrotide**<sup>®</sup>  
(cetorelix acetate) for injection

**VIDREL**<sup>®</sup> **Pen**  
(phosphogadotropin alpha) injection



# Understanding and Responding to Patient Needs

Committed to transforming lives by providing patient education and assistance programs, tools and services

## MS LifeLines\*

- For more than 15 years, MS LifeLines® has provided valuable education, information about our treatment, and financial assistance programs for eligible people with MS to address concerns about their treatment, adherence and access

Available toll free at 1-877-447-3243  
or visit [www.msllifelines.com](http://www.msllifelines.com)



- Comprehensive program that offers patients information on infertility and options; resources; as well as access and reimbursement support

Available toll free at 1-866-538-7879  
or visit [www.fertilitylifelines.com](http://www.fertilitylifelines.com)

## CoverOne®

- Access and reimbursement support services to help patients gain appropriate access to our oncology drug in the United States

Available toll free at 1-844-8COVER1



- A dedicated reimbursement and product support service for patients with HIV-associated wasting

Available toll free at 1-877-714-AXIS  
(2947)



These programs are not intended to replace discussions patients have with their doctors or nurses. Patients are always urged to contact their healthcare professionals if they have specific health concerns.



# IMAGINING THE FUTURE



# R&D Strategy

We are a science-driven organization, focused on delivering a transformative pipeline that aims to make a real difference for patients by helping to create, improve and prolong lives.





# R&D Requires Collaboration

## Globally Integrated R&D

- Activities structured around **highly-connected hubs as centers of excellence.**
- **Strong network of alliances** with local biotech companies and academic groups.
- **Approximately 3,000 professionals worldwide.**

## Partnerships and Agreements



**Boston hub**

550+ scientists and clinical development professionals



**Darmstadt hub**

1,300+ scientists and clinical development professionals



**Beijing hub**

80 professionals across R&D



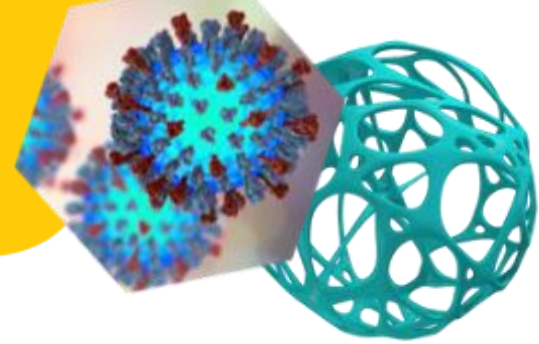
**Tokyo hub**

80 professionals across R&D

# Our Curiosity: Changing Lives

## A Glimpse at Our Pipeline

More than 20 projects in clinical development



### Tepotinib

Investigational oral MET inhibitor that is designed to inhibit the oncogenic MET receptor signaling caused by MET (gene) alterations, including both MET exon 14 skipping mutations and MET amplifications, or MET protein overexpression. Tepotinib is currently being investigated in NSCLC, with the potential of exploring other tumor indications.

### Evobrutinib

Investigational oral inhibitor of Bruton tyrosine kinase (BTK) being studied as a treatment for MS.

### bintrafusp alfa (M7824)

Investigational bifunctional immunotherapy that is designed to combine a TGF- $\beta$  trap with the anti-PD-L1 mechanism in one fusion protein. Bintrafusp alfa (M7824) is designed to combine co-localized blocking of the two immunosuppressive pathways – targeting both pathways aims to control tumor growth by potentially restoring and enhancing anti-tumor responses. Bintrafusp alfa (M7824) is currently in Phase I studies for solid tumors, as well as a randomized Phase II trial to explore NSCLC.

### avelumab

A human anti-programmed death ligand-1 (PD-L1) antibody. The clinical development program for avelumab, known as JAVELIN, involves at least 30 clinical programs and more than 9,000 patients evaluated across more than 15 different tumor types, including breast, gastric/gastro-esophageal junction, and head and neck cancers, Merkel cell carcinoma, non-small cell lung cancer, and urothelial carcinoma.

### DNA DAMAGE RESPONSE (DDR)

An oncology portfolio that includes inhibitors for enzymes of major DDR pathways.



# Merck KGaA, Darmstadt, Germany Pipeline

April 30, 2020

## Phase I

**berzosertib (M6620)**  
ATR inhibitor  
Solid tumors

**peposertib (M3814)**  
DNA-PK inhibitor  
Solid tumors<sup>1</sup>

**M1774**  
ATR inhibitor  
Solid tumors

**M3258**  
LMP7 inhibitor  
Multiple myeloma

**M4344**  
ATR inhibitor  
Solid tumors

**M8891**  
MetAP2 inhibitor  
Solid tumors

**bintrafusp alfa**  
TGFbeta trap/anti-PD-L1  
Solid tumors

**M9241 (NHS-IL12)**  
Cancer immunotherapy  
Solid tumors<sup>1</sup>

**M5049**  
TLR7/8 antagonist  
Immunology

**M6495**  
anti-ADAMTS-5 nanobody  
Osteoarthritis

**M5717**  
PeEF2 inhibitor  
Malaria

- Oncology
- Immuno-Oncology
- Immunology
- Neurology
- Global Health

## Phase II

**peposertib (M3814)**  
DNA-PK inhibitor  
Rectal cancer

**tepotinib**  
MET kinase inhibitor  
Non-small cell lung cancer

**abಿತuzumab**  
pan- $\alpha$  integrin inhibiting mAb  
Colorectal cancer 1L

**avelumab**  
anti-PD-L1 mAb  
Merkel cell cancer 1L

**avelumab**  
anti-PD-L1 mAb  
Solid tumors<sup>2</sup>

**avelumab**  
anti-PD-L1 mAb  
Non-small cell lung cancer<sup>2</sup>

**avelumab**  
anti-PD-L1 mAb  
Urothelial cancer<sup>2</sup>

**bintrafusp alfa**  
TGFbeta trap/anti-PD-L1  
Non-small cell lung cancer 1L

**bintrafusp alfa**  
TGFbeta trap/anti-PD-L1  
Non-small cell lung cancer 1L/2L

**bintrafusp alfa**  
TGFbeta trap/anti-PD-L1  
Locally advanced non-small cell lung cancer

**bintrafusp alfa**  
TGFbeta trap/anti-PD-L1  
Biliary tract cancer 1L

**bintrafusp alfa**  
TGFbeta trap/anti-PD-L1  
Biliary tract cancer 2L

**bintrafusp alfa**  
TGFbeta trap/anti-PD-L1  
Cervical cancer 2L

**atacept**  
anti-BlyS/APRIL fusion protein  
Systemic lupus erythematosus

**atacept**  
anti-BlyS/APRIL fusion protein  
IgA nephropathy

**sprifermin**  
fibroblast growth factor 18  
Osteoarthritis

**M1095 (ALX-0761)<sup>3</sup>**  
anti-IL-17 A/F nanobody  
Psoriasis

## Phase III

**avelumab**  
anti-PD-L1 mAb  
Non-small cell lung cancer 1L

**evobrutinib**  
BTK inhibitor  
Multiple sclerosis

## Registration

**tepotinib**  
MET kinase inhibitor  
Non-small cell lung cancer, *METex14* skipping<sup>4</sup>

**avelumab**  
anti-PD-L1 mAb  
Urothelial cancer 1L-M<sup>5</sup>

1L, first-line treatment; 1L-M, first-line maintenance treatment; 2L, second-line treatment.

<sup>1</sup>Includes studies in combination with avelumab. <sup>2</sup>Avelumab combination studies with talazoparib, axitinib, ALK inhibitors, cetuximab, or chemotherapy. <sup>3</sup>As announced on March 30 2017, in an agreement with Avillion, anti-IL-17 A/F nanobody will be developed by Avillion for plaque psoriasis and commercialized by Merck. <sup>4</sup>As announced on March 25 2020, tepotinib was approved in Japan for the treatment of patients with non-small cell lung cancer harboring *METex14* skipping. <sup>5</sup>As announced on April 09 2020, a supplemental Biologics License Application (sBLA) has been submitted to the US Food and Drug Administration (FDA) for avelumab for first-line maintenance treatment of patients with locally advanced or metastatic urothelial carcinoma.

Pipeline products are under clinical investigation and have not been proven to be safe and effective. There is no guarantee any product will be approved in the sought-after indication.



# DIFFERENCE MAKERS IN SCIENCE AND COMMUNITY



At EMD Serono, supporting scientific research, medical education and the broader local community is an organizational priority.

We provide nearly **\$5 Million** per year in science and medical education grants, fellowships, and patient education programs/initiatives.

In addition, we believe in giving back to the communities in which we work and live, whether supporting STEM education in Boston or donating thousands of volunteer hours annually.



# Our U.S. Presence

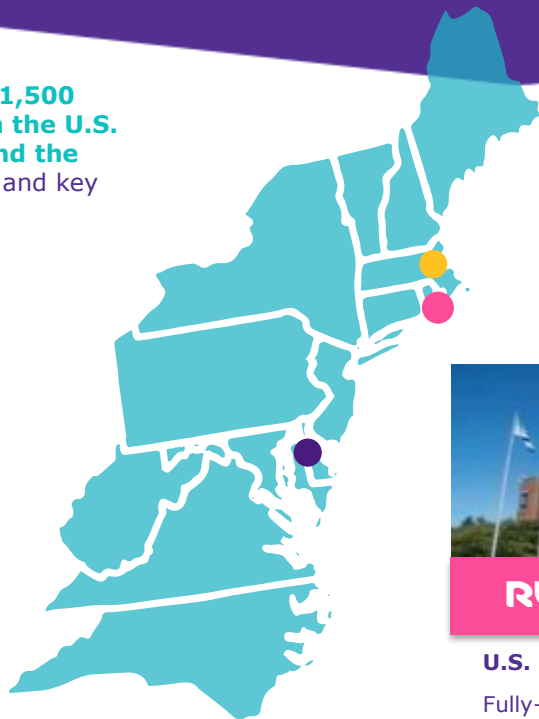
Today, EMD Serono has approximately **1,500 employees across three locations in the U.S. including 300 field employees around the U.S.** in clinical trial management, sales and key commercial operations.



**washington, D.C.**

## Government Affairs

Health Policy and U.S. Regulatory Strategy



**Billerica, MA**

## Research & Development Institute

Global R&D Hub, including discovery, development and clinical operations



**Rockland, MA**

## U.S. Headquarters

Fully-integrated Commercial Operations



# EMD SERONO AT A GLANCE

## Our Curiosity Drives Innovation

Our approximately 1,500 U.S. employees are empowered by science and committed to providing valuable medicines, drug-delivery devices and support services. We work to truly understand and respond to the therapeutic and support needs of individual patients through industry-leading patient education and assistance programs, tools, and services.

**Driving human progress** for more than **350 years** at our global headquarters in Germany, and 40+ years in the U.S. at our corporate headquarters in Rockland, MA and the Research and Development (R&D) hub in Billerica, MA

- 8 drug products
- Therapeutic Areas of Focus: **Neurology & Immunology, Oncology, Fertility, Endocrinology**
- ~2M people helped through our support services
- ~\$5M/year donated to community organizations and non-profits
- ~1,500 employees



Please see MAVENCLAD full Prescribing Information, including **boxed WARNING**.



# MERCK KGaA, Darmstadt, Germany

*EMD Serono is part of a larger global company known as Merck KGaA, Darmstadt, Germany, which is comprised of three businesses*

**\$18.3B (2019) • 50,000 Employees from 139 nations work in 66 countries • 350+ Year History**

The three global businesses focused on healthcare, life science and performance materials are known as the following in the U.S.:

**EMD  
SERONO**

... integrates vibrant science, valuable products and devices and industry-leading patient education and assistance programs, tools and services.

**MILLIPORE  
SIGMA**

... offers live science tools and performance products and provides innovative solutions for scientists and engineers.

**EMD  
PERFORMANCE  
MATERIALS**

... specializes in providing new and innovative technologies and high-tech materials for a variety of industries, including electronics and semiconductors.

**\$18.3**

Billion in Sales  
(2019)

**\$2.6B**

R&D investment  
(2019)

**20+**

Projects in clinical  
development

\*The biopharmaceutical business of Merck KGaA, Darmstadt, Germany operates as EMD Serono in the United States and Canada



**In the United States: more than 10,000 employees across ~65 sites**



# Appendix

Additional Slides for Reference



Research  
solutions

Process  
solutions

Applied  
solutions

## MilliporeSigma: Life Science Business

Most **complete portfolio** of solutions that enable scientific discovery

Products that meet the **highest quality** and **purity standards** with extensive documentation and services to ensure regulatory compliance

**Products and workflow** solutions that streamline processes, reduce costs, and deliver consistent, reliable results



# EMD Performance Materials

## >500 Employees in 8 Sites

**Charlotte, NC (PM-I)**  
Quality Control Labs

**Branchburg, NJ (PM-I)**  
Manufacturing and R&D

**Haverhill, MA (PM-I)**  
Manufacturing and R&D

**Martin, SC (PM-I)**  
Production

**San Diego, CA (PM-I)**  
Production and R&D

**Savannah, GA (PM-P)**  
Manufacturing

**Philadelphia, PA (HQ  
and PM-P)**  
PM US Headquarters

**Billerica, MA (PM-A/D)**  
Scouting

## Performance Materials

Provides new technologies and high-tech materials for a variety of industries: consumer electronics, semiconductors, lighting, coatings, printing technology, plastics, cosmetics

### Display Materials

Liquid crystals and photoresists for LCD televisions, smartphones, tablet computers, and other displays

### Integrated Circuit Materials

Dielectrics, colloidal silica, lithography, photoresists, yield enhancers, edge bead removers and other ancillary products for the production of integrated circuits

### Pigments & Functional Materials

Effect and functional pigments for coatings, plastics, foods or cosmetics as well as functional materials for specialist applications

### Advanced Technologies

Materials for organic (OLED) and inorganic (LED) light emitting diodes and functional material for electronics and energy solutions



