



COVID-19 RESPONSE

EMD Serono

*The biopharmaceutical business of
Merck KGaA, Darmstadt, Germany*

**EMD
SERONO**

OUR PROMISE

Our global organization is dedicated to serving patients, scientists and healthcare providers in the U.S. and around the world – now more than ever.

We actively contribute resources as well as our full dedication and expertise to fight the COVID-19 pandemic, while continuing to supply medicines for those who are among the most vulnerable in the pandemic—patients affected by serious diseases.

Our Merck KGaA, Darmstadt, Germany
Footprint Across Healthcare:

17,000
healthcare
employees
around the
world

1,500
employees in
the U.S.



OUR COMMITMENT

Supporting the investigation of potential therapeutics for COVID-19



OUR CONTRIBUTION

To push scientific progress to fight the virus through strong collaborations and research funding



OUR DEDICATION

To continue to provide patients around the world living with serious diseases with the medication they need each and every day



OUR SUPPORT

To help patients, doctors and the community most impacted by the pandemic



OUR PEOPLE

The safety and wellbeing of employees around the world

**EMD
SERONO**



OUR COMMITMENT

To support the investigation of potential therapeutics for COVID-19



Both donations for WHO and INSERM represent a total volume

290K+ Units

INSERM CLINICAL TRIAL DONATION

Donation of a supply of interferon beta-1a to the French Institut National de la Santé et de la Recherche Médicale (INSERM) following a request for use in a clinical trial

WHO SOLIDARITY TRIAL

Donation of units of interferon beta-1a to the World Health Organization for use in their global SOLIDARITY trial

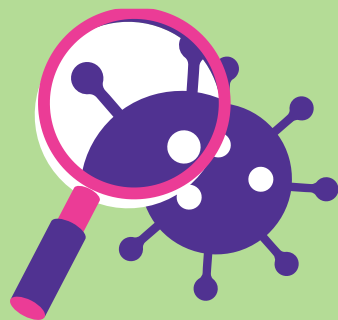
To date, EMD Serono's interferon beta-1a is not approved by any regulatory authority for the treatment of COVID-19 or for use as an antiviral agent. Please see the back of this deck (slide 8) for further information on the product.

TASK FORCE SCREENING PIPELINE FOR POTENTIAL THERAPEUTICS



OUR CONTRIBUTION

To scientific progress to fight COVID-19 through collaborations and research funding



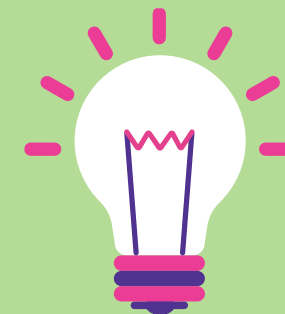
BILL & MELINDA GATES THERAPEUTIC ACCELERATOR

Collaboration to accelerate the development, manufacture, and delivery of vaccines, diagnostics, and treatments for COVID-19



FUTURE INSIGHTS PRIZE PANDEMIC PREPAREDNESS

Award of up to € 1 million for outstanding research in the field of pandemic preparedness to Pardis Sabeti and James Crowe



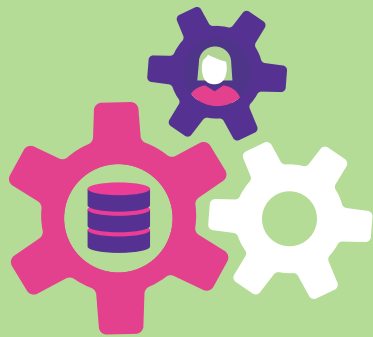
JENNER INSTITUTE VACCINE DEVELOPMENT

Our sister business, MilliporeSigma, supports Jenner Institute to reach first milestone in COVID-19 vaccine manufacturing



OUR SUPPORT

To those impacted by the COVID-19 pandemic – whether our patients, the community, or those on the front lines.



FINANCIAL ASSISTANCE

Patients on our therapies impacted by the pandemic through job loss or insurance loss may qualify for patient assistance services.*



CASH & GOODS

Global in-country donations to local charitable organizations or local pharma associations to support healthcare frontline workers with protective equipment.



MASKS

Donation of 2 million respiratory masks in the US, Germany, France and other countries to support healthcare workers

*Some limitations are required by law. Federal and state healthcare program beneficiaries are not eligible for assistance.



OUR DEDICATION

To continue to provide patients living with serious diseases with the medication they need each and every day



We are supplying medicines for those most vulnerable in this pandemic.

18 manufacturing sites and teams across the globe continuing to supply

**patients
worldwide**

Additionally, we are providing continuity of treatment for clinical trial participants.



OUR PEOPLE

To support and protect our employees and community

1500

Employees at EMD Serono are the backbone of our organization. Their safety and wellbeing remains our top priority; maintaining a safe workplace ensures our ability to manufacture and supply medicines to those who are among the most vulnerable in the pandemic—patients affected by serious diseases.



SAFETY

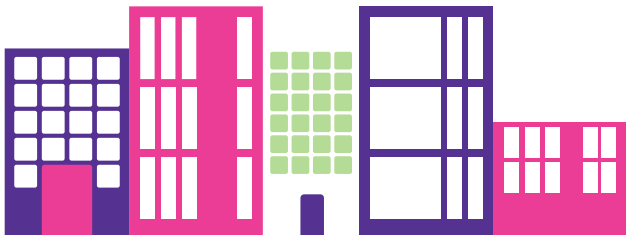
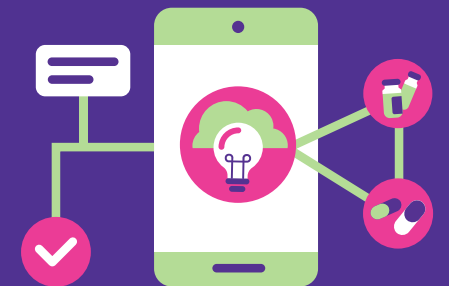
We've implemented measures to keep our employees safe while continuing to supply medicines to patients worldwide

- 1 Site de-densification and social distancing
- 2 Additional precautionary personal protective equipment
- 3 Regimented cleaning schedules at all locations

DIGITAL SOLUTIONS

Leveraging technology to collaborate with our key stakeholders and drive scientific progress

- 1 Virtual connections across our global team
- 2 Virtual meetings with Healthcare Professionals
- 3 Virtual congress platforms to share scientific data



About Rebif® (interferon beta-1a)

Rebif (interferon beta-1a) is indicated for the treatment of relapsing forms of multiple sclerosis (MS), to include clinically isolated syndrome, relapsing-remitting disease, and active secondary progressive disease, in adults.

IMPORTANT SAFETY INFORMATION

Rebif is contraindicated in patients with a history of hypersensitivity to natural or recombinant interferon beta, human albumin, or any other component of the formulation.

Rebif should be used with caution in patients with depression, a condition that is common in people with multiple sclerosis. Depression, suicidal ideation, and suicide attempts have been reported to occur with increased frequency in patients receiving interferon compounds, including Rebif.

Severe liver injury, including some cases of hepatic failure requiring liver transplantation, has been reported rarely in patients taking Rebif. The potential for liver injury should be considered when used in combination with other products associated with liver injury. Monitor liver function tests and patients for signs and symptoms of hepatic injury. Consider discontinuing Rebif if hepatic injury occurs.

Anaphylaxis and other allergic reactions (some severe) have been reported as a rare complication of Rebif. Discontinue Rebif if anaphylaxis occurs.

In controlled clinical trials, injection site reactions occurred more frequently in Rebif-treated patients than in placebo-treated and Avonex-treated patients^{1,2}. Injection site reactions including injection site pain, erythema, edema, cellulitis, abscess, and necrosis have been reported in the postmarketing setting. Do not administer Rebif into affected area until fully healed; if multiple lesions occur, discontinue Rebif until skin lesions are healed.

Decreased peripheral blood counts in all cell lines, including pancytopenia, have been reported in Rebif-treated patients. In controlled clinical trials, leukopenia occurred at a higher frequency in Rebif-treated patients than in placebo and Avonex-treated patients^{1,2}. Thrombocytopenia and anemia occurred more frequently in 44 mcg Rebif-treated patients than in placebo-treated patients¹. Patients should be monitored for symptoms or signs of decreased blood counts. Monitoring of complete blood and differential white blood cell counts is also recommended.

Cases of thrombotic microangiopathy (TMA), some fatal, have been reported with interferon beta products, including Rebif, up to several weeks or years after starting therapy. Discontinue Rebif if clinical symptoms and laboratory findings consistent with TMA occur, and manage as clinically indicated.

Caution should be exercised when administering Rebif to patients with pre-existing seizure disorders. Seizures have been temporally associated with the use of beta interferons, including Rebif, in clinical trials and in postmarketing reports.

The most common side effects with Rebif are injection-site disorders, headaches, influenza-like symptoms, abdominal pain, depression, elevated liver enzymes, and hematologic abnormalities.

Epidemiological data do not suggest a clear relationship between interferon beta use and major congenital malformations, but interferon beta may cause fetal harm based on animal studies. Data from a large human population-based cohort study, as well as other published studies over several decades, have not identified a drug-associated risk of major birth defects with interferon beta products during early pregnancy. Findings regarding a potential risk for low birth weight or miscarriage with the use of interferon beta products in pregnancy have been inconsistent.

Please see the full Prescribing Information for additional information: <https://www.emdserono.com/us-en/pi/rebif-pi.pdf>

1. PRISMS Study Group. Lancet 1998;352:1498–504.
2. Panitch et al. NEUROLOGY 2002;59:1496–1506.
3. Rebif® (interferon beta-1a) US Prescribing Information, 2020

The logo for EMD Serono, featuring the words "EMD" and "SERONO" stacked vertically in a bold, pink, sans-serif font.

