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**Merck KGaA, Darmstadt, Germany, Licenses Four Oncology Research and Development Programs from Vertex and Becomes a Leader in DNA Damage and Repair**

- Merck KGaA, Darmstadt, Germany, licenses two promising clinical-stage programs targeting DNA damage and repair, and two novel pre-clinical programs
- All programs have first-in-class and best-in-class potential
- Vertex receives upfront payment of $230 million plus royalties on future sales

Darmstadt, Germany, January 11, 2017 – Merck KGaA, Darmstadt, Germany, a leading science and technology company which operates its biopharmaceutical business in the US and Canada as EMD Serono, today announced that it has entered into a licensing agreement with Vertex Pharmaceuticals Incorporated, Boston, USA, for the worldwide development and commercialization of four promising research and development programs that represent novel approaches to the treatment of cancer.

“With this strategic deal we significantly strengthen our oncology pipeline in two attractive areas where we have leading competence, DNA damage and repair and immuno-oncology—areas which also have promising therapeutic synergy,” says Belen Garijo, CEO Healthcare and Member of the Executive Board of Merck KGaA, Darmstadt, Germany. “This deal underscores our commitment to accelerate innovation for cancer patients, and we are excited for the opportunity to build on Vertex's rigorous science and advance these leading programs.”
As part of the agreement, Merck KGaA, Darmstadt, Germany will license two clinical-stage programs targeting DNA damage and repair, along with two additional novel pre-clinical programs. Vertex will receive an upfront payment of $230 million, in addition to royalties on future net sales. Merck KGaA, Darmstadt, Germany, will assume full responsibility for the development and commercialization of all the programs.

“"The Vertex R&D team has produced a portfolio of first-in-class compounds with the potential to enhance the therapy of multiple cancers,” said Jeffrey Leiden, Chairman, President and CEO of Vertex. "We are pleased to partner with Merck KGaA, Darmstadt, Germany, a leader in oncology with exciting complementary assets that will help fully realize the value of these unique compounds and accelerate the programs' potential benefits for patients.”

The two clinical-stage programs represent first-in-class approaches to inhibit the DNA repair pathways that are fundamental to the survival and proliferation of certain cancers:

- An ataxia telangiectasia and Rad3 related (ATR) program comprised of two compounds, VX-970 and VX-803. VX-970 is being investigated broadly through 10 ongoing Phase 1 and Phase 2 trials across a variety of tumors and patient subtypes expected to be responsive to ATR inhibition based on biomarker data. Preliminary VX-970 clinical data were presented at the 2016 American Society of Clinical Oncology (ASCO) Annual Meeting and the 2016 American Association for Cancer Research (AACR) Annual Meeting. VX-803 is an orally dosed ATR inhibitor currently in Phase 1 trials evaluating escalating doses of VX-803 alone and in combination with chemotherapy.

- A DNA-dependent protein kinase (DNA-PK) inhibitor program including the clinical candidate VX-984. A Phase 1 trial is now evaluating escalating doses of VX-984 alone and in combination with pegylated liposomal doxorubicin in subjects with advanced solid tumors. Merck KGaA, Darmstadt, Germany, will combine these assets with its existing DNA-PK assets into a single development program.
The preclinical programs include one immuno-oncology program against an attractive target with first-in-class potential, and a program against a completely novel target. For both of these programs, Vertex research has demonstrated efficacy in relevant preclinical models, including demonstration of combination potential with immune checkpoint inhibition for the immuno-oncology program. Merck KGaA, Darmstadt, Germany, will continue to characterize the Vertex compounds in these programs with the goal of taking them forward into the clinic.

The strength of the oncology R&D program of Merck KGaA, Darmstadt, Germany, including a leading presence in immunotherapy and DNA damage and repair, demonstrates how the company is re-imagining the way cancer can be treated.

**About Vertex**
Vertex is a global biotechnology company that aims to discover, develop and commercialize innovative medicines so people with serious diseases can lead better lives. In addition to our clinical development programs focused on cystic fibrosis, Vertex has more than a dozen ongoing research programs aimed at other serious and life-threatening diseases.

Founded in 1989 in Cambridge, Mass., Vertex today has research and development sites and commercial offices in the United States, Europe, Canada and Australia. For seven years in a row, Science magazine has named Vertex one of its Top Employers in the life sciences. For additional information and the latest updates from the company, please visit www.vrtx.com.

**EMD Serono**
EMD Serono is the biopharmaceutical business of Merck KGaA, Darmstadt, Germany, in the U.S. and Canada - a leading science and technology company - focused exclusively on specialty care. For more than 40 years, the business has integrated cutting-edge science, innovative products and industry-leading patient support and access programs. EMD Serono has deep expertise in neurology, fertility and endocrinology, as well as a robust pipeline of potential therapies in oncology, immuno-oncology and immunology as R&D focus areas. Today, the business has more than 1,100 employees around the country with commercial, clinical and research operations based in the company’s home state of Massachusetts.

All Merck KGaA, Darmstadt, Germany, press releases are distributed by e-mail at the same time they become available on the EMD Group Website. In case you are a resident of the USA or Canada please go to [www.emdgroup.com/subscribe](http://www.emdgroup.com/subscribe) to register again for your online subscription of this service as our newly introduced geo-targeting requires new links in the email. You may later change your selection or discontinue this service.

**Merck KGaA, Darmstadt, Germany**
Merck KGaA, Darmstadt, Germany, is a leading science and technology company in healthcare, life science and performance materials. Around 50,000 employees work to further develop technologies that improve and enhance life – from biopharmaceutical therapies to treat cancer or multiple sclerosis, cutting-edge systems for scientific research and production, to liquid crystals for smartphones and LCD televisions. In 2015, Merck KGaA, Darmstadt, Germany, generated sales of € 12.85 billion in 66 countries.

Founded in 1668, Merck KGaA, Darmstadt, Germany, is the world’s oldest pharmaceutical and chemical company. The founding family remains the majority owner of the publicly listed corporate group. Merck KGaA, Darmstadt, Germany, holds the global rights to the Merck KGaA, Darmstadt, Germany, name and brand. The only exceptions are the United States and Canada, where the company operates as EMD Serono, MilliporeSigma and EMD Performance Materials.