NEWS RELEASE

Vertex Announces Health Canada Acceptance of New Drug Submission for Vanzacaftor/Tezacaftor/Deutivacaftor, a Next-in-Class Triple Combination Treatment for Cystic Fibrosis

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TORONTO, Sept. 26, 2024 /CNW/ - **Vertex Pharmaceuticals Incorporated** (Nasdaq: VRTX) today announced that Health Canada has accepted for review its New Drug Submission (NDS) for vanzacaftor/tezacaftor/deutivacaftor, a once-daily triple combination therapy for people living with cystic fibrosis (CF) ages 6 years and older who have at least one F508del mutation or another responsive mutation in the cystic fibrosis transmembrane conductance regulator (CFTR) gene.

"Vanzacaftor raises the bar set by TRIKAFTA® by demonstrating comparable lung function improvement and additional improvements in CFTR function, as measured by sweat chloride in Phase 3 trials," said Michael Siauw, General Manager at Vertex Pharmaceuticals (Canada) Incorporated. "Health Canada's acceptance of the vanzacaftor submission for review brings us one step closer to providing a new treatment option, with potential for additional benefit, for eligible people living with CF."

The NDS will be part of an aligned review with Canadian Health Technology Assessment (HTA) organizations, Canada's Drug Agency (CDA) and the Institut national d'excellence en santé et en services sociaux (INESSS) in Quebec.

Vanzacaftor is also undergoing regulatory review in multiple other jurisdictions, including by the Food and Drug Administration (FDA) in the U.S. and by the European Medicines Agency (EMA) in the E.U.

About Cystic Fibrosis

Cystic fibrosis (CF) is a rare, life-shortening genetic disease affecting more than 92,000 people globally. CF is a progressive, multi-organ disease that affects the lungs, liver, pancreas, GI tract, sinuses, sweat glands and reproductive tract. CF is caused by a defective and/or missing CFTR protein resulting from certain mutations in the CFTR gene. Children must inherit two defective CFTR genes — one from each parent — to have CF, and these mutations can be identified by a genetic test. While there are many different types of CFTR mutations that can cause the disease, the vast majority of people with CF have at least one F508del mutation. CFTR mutations lead to CF by causing CFTR protein to be defective or by leading to a shortage or absence of CFTR protein at the cell surface. The defective function and/or absence of CFTR protein results in poor flow of salt and water into and out of the cells in a number of organs. In the lungs, this leads to the buildup of abnormally thick, sticky mucus, chronic lung infections and progressive lung damage that eventually leads to death for many patients. The median age of death is in the 30s, but with treatment, projected survival is improving.

Today Vertex CF medicines are treating over 65,000 people with CF across 60 countries on six continents. This represents 2/3 of the diagnosed people with CF eligible for CFTR modulator therapy.

Diagnosis of CF is often made by genetic testing and is confirmed by testing sweat chloride (SwCl), which measures CFTR protein dysfunction. The diagnostic threshold for CF is SwCl ≥60 mmol/L, while levels between 30-59 indicate CF is possible and more testing may be needed to make the diagnosis of CF. A SwCl level of <30 mmol/L is seen in people who carry one copy of a CFTR gene mutation but do not have any manifestation of disease (carriers). Higher levels of SwCl are associated with more severe disease. Restoring CFTR function leads to lower levels of SwCl. Restoring SwCl levels below 30 mmol/L has long been the ultimate treatment goal for Vertex, as levels below 30 mmol/L are considered normal and are typical of CF carriers who do not have disease.

About vanzacaftor/tezacaftor/deutivacaftor (the "vanza triple")

In people with CF, mutations in the CFTR gene lead to decreased quantity and/or function of the CFTR protein channel at the cell surface. Vanzacaftor and tezacaftor are designed to increase the amount of CFTR protein at the cell surface by facilitating the processing and trafficking of the CFTR protein. Deutivacaftor is a potentiator designed to increase the channel open probability of the CFTR protein delivered to the cell surface to improve the flow of salt and water across the cell membrane. The vanza triple remains investigational in Canada, and the safety and efficacy have not been established by Health Canada.

About Vertex

Vertex is a global biotechnology company that invests in scientific innovation to create transformative medicines for

people with serious diseases. The company has approved medicines that treat the underlying causes of multiple chronic, life-shortening genetic diseases — cystic fibrosis, sickle cell disease and transfusion-dependent beta thalassemia — and continues to advance clinical and research programs in these diseases. Vertex also has a robust clinical pipeline of investigational therapies across a range of modalities in other serious diseases where it has deep insight into causal human biology, including acute and neuropathic pain, APOL1-mediated kidney disease, IgA nephropathy, autosomal dominant polycystic kidney disease, type 1 diabetes, myotonic dystrophy type 1 and alpha-1 antitrypsin deficiency.

Vertex was founded in 1989 and has its global headquarters in Boston, with international headquarters in London. Additionally, the company has research and development sites and commercial offices in North America, Europe, Australia and Latin America. Vertex is consistently recognized as one of the industry's top places to work, including 14 consecutive years on Science magazine's Top Employers list and one of Fortune's 100 Best Companies to Work For. For company updates and to learn more about Vertex's history of innovation, visit **www.vrtx.ca**.

Special Note Regarding Forward-Looking Statements

This press release contains forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995, as amended, including, without limitation, statements by Michael Siauw in this press release, and statements regarding our expectations for the benefits of and potential for vanzacaftor and our expectations for the NDS. While Vertex believes the forward-looking statements contained in this press release are accurate, these forward-looking statements represent the company's beliefs only as of the date of this press release and there are a number of risks and uncertainties that could cause actual events or results to differ materially from those expressed or implied by such forward-looking statements. Those risks and uncertainties include, among other things, that data from the company's development programs may not support registration or further development of its compounds due to safety, efficacy, or other reasons, and other risks listed under the heading "Risk Factors" in Vertex's most recent annual report and subsequent quarterly reports filed with the Securities and Exchange Commission at **www.sec.gov** and available through the company's website at **www.vrtx.com**. You should not place undue reliance on these statements or the scientific data presented. Vertex disclaims any obligation to update the information contained in this press release as new information becomes available.

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