

## AdaptVac receives Industrial PhD grant and initiates new vaccine development research program in cardiovascular disease

**Hørsholm, Denmark, December 20, 2018 – AdaptVac announces that it has been awarded an Industrial PhD grant by the Danish Innovation Foundation worth DKK 1 million. The grant will support a three-year virus-like particle vaccine Ind. PhD research program focused on PCSK-9, a billion-dollar monoclonal antibody validated cardiovascular disease target.**

“We are delighted by this grant from the Danish Innovation Foundation that will enable us to initiate a new vaccine development program in cardiovascular disease. This will not only accelerate our vaccine research activities, but also offer external validation of our ground-breaking vaccine platform’s potential to target self-antigens in cancer and cardiovascular disease”, says Dr. Wian de Jongh, AdaptVac’s CEO.

### **Targeting cardiovascular disease through vaccination**

Proprotein convertase subtilisin/kexin type 9 (PCSK9) is a regulator of serum low-density lipoprotein-cholesterol (LDL-C) (i.e. bad cholesterol). Individuals with no serum PCSK9 also have exceptionally low cholesterol levels and ~50% decreased risk of developing cardiovascular disease (CVD). This makes PCSK9 a highly promising therapeutic target for treatment of cholesterol-associated CVD. Treatment with PCSK9-specific monoclonal antibodies has recently been approved by the FDA as second-line treatment for patients with hypercholesterolemia. Unfortunately, there are significant limitations to monoclonal antibody (mAb) therapy both in terms of patient access and in terms of clinical utility. The required frequent intravenous administrations of high doses of mAb are expensive, and in many cases, patients receiving multiple mAb treatments develop immunity resulting in loss of drug efficacy. In comparison, vaccination would require far fewer administrations and lower doses of the drug and could therefore be used as a safer, cheaper and more effective treatment.

“The proprietary VLP-based vaccine platform was originally developed at the Centre for Medical Parasitology (CMP), Department of Immunology and Microbiology, University of Copenhagen. We are therefore excited to have CMP as a partner in this program, which ensures access to the facilities and expertise necessary to work on this promising project in an optimal way”, says Dr. Adam Frederik Sander Bertelsen, CSO.

### **Strong market potential in Hypercholesterolemia**

Hypercholesterolemia is a highly prevalent condition with more than 136 million cases per year across the seven major markets. The projected market size for PCSK-9 targeting monoclonal antibody therapies is \$3 billion by 2024 (GlobalData), and the total market for cholesterol lowering treatments is estimated to be \$24 billion. A noted factor in the slow uptake of the monoclonal antibody treatments to date have been cost, an area where AdaptVac’s VLP vaccine approach has clear and significant advantages.

### **About AdaptVac ApS**

AdaptVac is a joint venture between ExpreS<sup>2</sup>ion Biotechnologies and NextGen Vaccines, combining ExpreS<sup>2</sup>ion’s platform with novel proprietary and ground-breaking Virus-Like Particle (VLP) technology, developed at the University of Copenhagen. The company aims to accelerate the development of highly efficient therapeutic and prophylactic vaccines within high value segments of oncology, infectious diseases and immunological disorders.

**For further information about AdaptVac ApS, please contact:**

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