



## **Agilis Biotherapeutics Announces Orphan Designation Approval in Europe for the Treatment of AADC Deficiency**

### **First Treatment Candidate to Receive Orphan Designation in EU and USA**

**Cambridge, MA**, December 1, 2016 7:30 am EST -- (BUSINESS WIRE)—[Agilis Biotherapeutics](#), (Agilis), a biotechnology company advancing innovative DNA therapeutics for rare genetic diseases that affect the central nervous system (CNS), announced today that the European Commission (EC) has granted Orphan Medicinal Product (OMP) designation in the European Union (EU) to the Company's gene therapy product candidate, [AGIL-AADC](#). The EC's approval follows a positive opinion in October from the European Medicine Agency's (EMA) Committee for Orphan Medicinal Products (COMP). Earlier this year, Agilis received Orphan Drug Designation for AGIL-AADC from the U.S. Food and Drug Administration (FDA). Last month, the Company announced the FDA had granted a Rare Pediatric Disease (RPD) designation for AGIL-AADC. The complementary RPD designation now gives Agilis the ability to qualify for a Priority Review Voucher (PRV) upon approval of AGIL-AADC.

AGIL-AADC is being developed for the treatment of aromatic L-amino acid decarboxylase (AADC) deficiency, a rare disease arising from mutations in the dopa decarboxylase (DDC) gene. AADC deficiency can result in severe developmental failures, global muscular hypotonia and dystonia, the need for life-long care and premature death. AGIL-AADC is the first therapeutic candidate to receive orphan designation for AADC deficiency in Europe.

The EU orphan designation provides Agilis with development and commercial incentives, including 10 years of market exclusivity, prioritized consultation by EMA on the development of the drug, including clinical studies, and certain exemptions from or reductions in regulatory fees in Europe.

“Receiving orphan status from the EC, in conjunction with the previous orphan drug designation and rare pediatric disease designation from the US FDA, is another step on our path to bringing this important new medicine to patients in need of an effective, durable treatment,” said Mark Pykett, President and CEO of Agilis. “The orphan designation in Europe provides important benefits during development and commercialization, and represents important progress as we seek to bring this novel treatment for AADC deficiency to the market.”

AGIL-AADC is an innovative gene therapy candidate being investigated to treat AADC deficiency by using an AAV vector to deliver a corrective DDC gene to rescue deficits in patients suffering from this disease. To date, 19 subjects have been treated in three prospective cohorts. Two prospective clinical cohorts evaluating 18 subjects with AADC deficiency have previously completed enrollment and treatment using a single administration of the gene therapy of AGIL-AADC; some of these patients have been followed for more than five years with evidence of substantial gains in motor and cognitive function over multiple years, as well as *de novo* dopamine production visualized by F-DOPA PET imaging and the emergence of dopamine metabolite biomarkers. In contrast, untreated subjects typically do not achieve critical developmental milestones, as observed in natural history cases. Recently, the Company announced that a third clinical cohort for AGIL-AADC has been initiated, a Phase IIb trial in which the first subject has been treated. This study will enroll patients in two parts, one evaluating the AGIL-AADC gene therapy dose used in prior studies and a second exploring an increased dose.

“We are grateful to Agilis for their commitment and investment in gene therapy treatment for AADC deficiency. The AADC Research Trust has been striving for over 10 years to find new and improved treatments for those who suffer with AADC deficiency. It is our sincere hope that Agilis’ candidate treatment and the designation of Orphan Medicinal Product status will rapidly lead to a more effective treatment for this devastating disorder,” said Lisa Flint, Managing Director of AADC Research Trust.

Orphan Designation is granted to drugs that are intended for the treatment of life threatening or chronically debilitating rare diseases where no therapeutic options either exist or are

satisfactory. Rare diseases are those defined as having a prevalence of less than five in 10,000 in Europe.

### **About AADC Deficiency**

Aromatic L-amino acid decarboxylase (AADC) deficiency is a rare genetic condition resulting from deficits in the enzyme, AADC which is responsible for the final step in the synthesis of the neurotransmitters dopamine (a precursor of norepinephrine and epinephrine) and serotonin (a precursor of melatonin). AADC deficiency arises from mutations in the dopa decarboxylase (DDC) gene. In its profound forms, AADC deficiency results in severe developmental failures, global muscular hypotonia and dystonia, severe, seizure-like episodes known as oculo-gyric crises, frequent hospitalizations (including prolonged stays in intensive care), and the need for life-long care. Symptoms and severity vary depending on the type of underlying genetic mutation which abrogates AADC enzyme function. Patients with severe forms usually die before the age of 7 years due to profound motor dysfunction, autonomic abnormalities, and secondary complications such as choking, hypoxia, and pneumonia. No treatment options other than palliative care currently exist for patients with severe AADC deficiency.

### **About Agilis Biotherapeutics, LLC**

Agilis is advancing innovative gene therapies designed to provide long-term efficacy for patients with debilitating, often fatal, rare genetic diseases that affect the central nervous system. Agilis' gene therapies are engineered to impart sustainable clinical benefits by inducing persistent expression of a therapeutic gene through precise targeting and restoration of lost gene function to achieve long-term efficacy. Agilis' rare disease programs are focused on gene therapy for AADC deficiency, Friedreich's ataxia, and Angelman syndrome, all rare genetic diseases that include neurological deficits and result in physically debilitating conditions.

We invite you to visit our website at [www.agilisbio.com](http://www.agilisbio.com)

### **Safe Harbor Statement**

Some of the statements made in this press release are forward-looking statements. These forward-looking statements are based upon our current expectations and projections about future events and

generally relate to our plans, objectives and expectations for the development of our business. Although management believes that the plans and objectives reflected in or suggested by these forward-looking statements are reasonable, all forward-looking statements involve risks and uncertainties and actual future results may be materially different from the plans, objectives and expectations expressed in this press release.

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