

## ORYZON starts preclinical collaboration on autism with the Seaver Autism Center at Mount Sinai

### ❖ Goal is to explore effects of LSD1 inhibition on animal models of autism in Shank3 deficient mice models

**MADRID, SPAIN and CAMBRIDGE, MA, UNITED STATES, April 6th, 2021** - Oryzon Genomics, S.A. (ISIN Code: ES0167733015, ORY), a clinical-stage biopharmaceutical company leveraging epigenetics to develop therapies in diseases with a strong unmet medical need, announced today the start of a preclinical collaboration on autism with researchers from the Seaver Autism Center for Research and Treatment at the Icahn School of Medicine at Mount Sinai led by Dr. Joseph Buxbaum.

Deletions or mutations at the end of chromosome 22 lead to a defect of the SHANK3 gene and produce in humans a variety of autism known as Phelan-McDermid Syndrome (PMS). Eighty percent of people with PMS have an autism spectrum disorder (ASD). It is thought that the inability of the single functioning copy of SHANK3 to produce enough Shank3 protein for normal functioning (haploinsufficiency) may be responsible for most of the neurologic symptoms (developmental delay, autism, and absent speech) associated with this disorder. Recent work published by US researchers has shown that the LSD1-HDAC2 complex is involved in PMS and that, in animal models defective for Shank3 which recapitulate many symptoms of the human syndrome, the inhibition of LSD1 restores neuronal electrophysiology and rescues learning deficits. This collaboration will explore the effects of vafidemstat in animal models developed and characterized at the Seaver Autism Center by the team of Dr. Buxbaum.

Vafidemstat is a selective, orally active LSD1 inhibitor in Phase II clinical development that has shown a very good safety profile and has been shown to be effective at reducing agitation and aggression in clinical studies in patients with Alzheimer's disease, Borderline Personality Disorder (BPD), Attention-Deficit/Hyperactivity Disorder (ADHD) and ASD. Vafidemstat is currently being explored in a Phase IIb clinical trial in BPD (PORTICO study) and the company is also preparing a Phase IIb trial in schizophrenia (EVOLUTION study). The company is also exploring the use of vafidemstat in the field of precision psychiatry.

Professor Buxbaum, Director of the Seaver Autism Center at the Icahn School of Medicine at Mount Sinai and principal investigator of the study, said: "We have worked on PMS for more than a decade and are very excited to advance this potential treatment for this disorder."

Dr. Carlos Buesa, Oryzon's CEO, said: "We are excited to initiate this collaboration with researchers at the internationally renowned Seaver Autism Center at Mount Sinai. Epigenetic dysregulation in the histone H3K4 methylation pathway has been proposed to be an important mechanism in the pathogenesis of autism. Oryzon's vafidemstat with a good safety profile could bring a therapeutic option to these patients in the future."

### **About Oryzon**

Founded in 2000 in Barcelona, Spain, Oryzon (ISIN Code: ES0167733015) is a clinical stage biopharmaceutical company considered as the European champion in Epigenetics. Oryzon has one of the strongest portfolios in the field. Oryzon's LSD1 program has rendered two compounds, vafidemstat and iadamstat, in Phase II clinical trials. In addition, Oryzon has ongoing programs for developing inhibitors against other epigenetic targets. Oryzon has a strong technological platform for biomarker identification and performs biomarker and target validation for a variety of malignant and neurological diseases. Oryzon has offices in Spain and the United States. Oryzon is one of the most liquid biotech stocks in Europe with +90 M shares negotiated in 2020 (ORY:SM / ORY.MC / ORYZF US OTC mkt). For more information, visit [www.oryzon.com](http://www.oryzon.com)

### **About Vafidemstat**

Vafidemstat (ORY-2001) is an oral, CNS optimized LSD1 inhibitor. The molecule acts on several levels: it reduces cognitive impairment, including memory loss and neuroinflammation, and at the same time has neuroprotective effects. In animal studies vafidemstat not only restores memory but reduces the exacerbated aggressiveness of SAMP8 mice, a model for accelerated aging and Alzheimer's disease (AD), to normal levels and also reduces social avoidance and enhances sociability in murine models. In addition, vafidemstat exhibits fast, strong and durable efficacy in several preclinical models of multiple sclerosis (MS). Oryzon has performed two Phase IIa clinical trials in aggressiveness in patients with different psychiatric disorders (REIMAGINE) and in aggressive/agitated patients with moderate or severe AD (REIMAGINE-AD), with positive preliminary clinical results reported in both. Additional finalized Phase IIa clinical trials with vafidemstat include the ETHERAL trial in patients with Mild to Moderate AD, where a significant reduction of the inflammatory biomarker YKL40 has been observed after 6 months of treatment, and the pilot, small scale SATEEN trial in Relapse-Remitting and Secondary Progressive MS. A Phase IIb trial in borderline personality disorder (PORTICO) has been recently authorized and the company is preparing a Phase IIb trial in schizophrenia patients (EVOLUTION). Vafidemstat is also being explored in a Phase II in severe Covid-19 patients (ESCAPE) assessing the capability of the drug to prevent ARDS, one of the most severe complications of the viral infection.

### **FORWARD-LOOKING STATEMENTS**

This communication contains, or may contain, forward-looking information and statements about Oryzon, including financial projections and estimates and their underlying assumptions, statements regarding plans, objectives and expectations with respect to future operations, capital expenditures, synergies, products and services, and statements regarding future performance. Forward-looking statements are statements that are not historical facts and are generally identified by the words "expects," "anticipates," "believes," "intends," "estimates" and similar expressions. Although Oryzon believes that the expectations reflected in such forward-looking statements are reasonable, investors and holders of Oryzon shares are cautioned that forward-looking information and statements are subject to various risks and uncertainties, many of which are difficult to predict and generally beyond the control of Oryzon that could cause actual results and developments to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include those discussed or identified in the documents sent by Oryzon to the Spanish Comisión Nacional del Mercado de Valores (CNMV), which are accessible to the public. Forward-looking statements are not guarantees of future performance and have not been reviewed by the auditors of Oryzon. You are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date they were made. All subsequent oral or written forward-looking statements attributable to Oryzon or any of its members, directors, officers, employees or any persons acting on its behalf are expressly qualified in their entirety by the cautionary statement above. All forward-looking statements included herein are based on information available to Oryzon on the date hereof. Except as required by applicable law, Oryzon does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. This press release is not an offer of securities for sale in the United States or any other jurisdiction. Oryzon's securities may not be offered or sold in the United States absent registration or an exemption from registration. Any public offering of Oryzon's securities to be made in the United States will be made by means of a prospectus that may be obtained from Oryzon or the selling security holder, as applicable, that will contain detailed information about Oryzon and management, as well as financial statements.

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