

ORYZON Announces Publication of a relevant paper for the therapeutic development of ladademstat (ORY-1001) in Small Cell Lung Cancer (SCLC)

- Complete and durable tumor regression occurred with ladademstat induced NOTCH activation in a chemoresistant PDX model
- Further supports LSD1 inhibitors as a possible new and targeted therapy for SCLC
- Identifies the Mechanism-of-action
- ❖ Published in Science Signaling, from the Science (AAAS) group

MADRID, SPAIN and CAMBRIDGE, MA, UNITED STATES, February 6, 2019 – Oryzon Genomics, S.A. (ISIN Code: ES0167733015, ORY), a public clinical-stage biopharmaceutical company leveraging epigenetics to develop therapies in diseases with strong unmet medical need, announced today the publication by US scientists of a new paper in the February issue of Science Signaling, from the SCIENCE group (AAAS) describing how ORY-1001 (iadademstat) activates the NOTCH pathway, resulting in the repression of SCLC tumorigenesis in vitro and in patient-derived xenograft (PDX) models.

The paper, entitled "Targeting NOTCH activation in small cell lung cancer through LSD1 inhibition" has been published by David MacPherson's group at the Fred Hutchinson Cancer Research Center and the Department of Genome Sciences, University of Washington, both in Seattle, WA, US and details how LSD1 pharmacological inhibition with therapeutically-relevant doses of ORY-1001 results in the reactivation of the, in this context, tumor suppressor gene Notch, which causes the suppression of the transcription factor ASCL1, a protein activated in a majority of SCLC, resulting in the repression of SCLC tumorigenesis in vitro and in PDX models. This elucidation of the mechanism-of-action (MoA) is important: ASCL1 has been characterized to play an important role in SCLC tumorigenesis but this transcription factor is not classically "druggable", ORY-1001 opens now a possibility to achieve this goal as it shows a robust antitumor effect in certain PDX models of SCLC with a favorable safety profile.

Dr. Tamara Maes, CSO of ORYZON, stated "This excellent paper provides a first detailed characterization of the MoA that allows SCLC tumors to be deactivated through LSD1 inhibition and highlights the potential in this therapeutic indication of ORY-1001, with the observation of a clear antitumor activity in certain PDX models". "In Oryzon, we are firm believers in targeted therapies, and we have worked in recent years to identify biomarkers that we believe may be behind these best responses to our drug in SCLC and we have already started a clinical study in SCLC patients that applies these biomarkers as inclusion criteria."

CLEPSIDRA ("A Combination trial of LSD1 and Etop-Platinum in Small Cell Lung Cancer in Biomarker-ID Relapsed pAtients) is a Phase IIa trial of ladademstat that is being conducted in four hospitals in Spain. CLEPSIDRA enrols second line SCLC patients and is designed as a single-arm, open-label study of ladademstat in combination with the standard of care treatment platinum/etoposide, in order to

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evaluate the safety and tolerability as well as the clinical effect (including time to response, duration of response, objective response and overall survival) of the combination. The study is divided into two parts, the first one to optimize the dose of the combination and the second one to evaluate the efficacy of the combination. Approximately 36 patients are planned to be recruited in this study.

The Science Signaling article may be found at:

http://stke.sciencemag.org/content/sigtrans/12/567/eaau2922.full.pdf

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 ladademstat in 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 neurodegenerative diseases. Oryzon has offices in Spain and the United States. For more information, visit www.oryzon.com

About Iadademstat

ladademstat (ORY-1001) is a small oral molecule, which acts as a highly selective inhibitor of the epigenetic enzyme LSD1 and has a powerful differentiating effect in hematologic cancers (See Maes et al., Cancer Cell 2018 Mar 12; 33 (3): 495-511.e12.doi: 10.1016 / j.ccell.2018.02.002.). A first Phase I/IIa clinical trial with ladademstat in refractory and relapsed acute leukemia patients demonstrated the safety and good tolerability of the drug and preliminary signs of antileukemic activity, including a CRi. Beyond hematological cancers, the inhibition of LSD1 has been proposed as a valid therapeutic approach in some solid tumors such as small cell lung cancer (SCLC), medulloblastoma and others. Oryzon has recently started two Phase IIa clinical trials of ladademstat in combination; the first one in combination with Azacitidine in elderly AML patients (ALICE study) and the second one in combination with platinum/etoposide in second line SCLC patients (CLEPSIDRA study).

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