



**ORYZON**

**A GLOBAL LEADER IN EPIGENETICS**

MADX: ORY

**BioSpain 2016**

28<sup>th</sup>-30<sup>th</sup> September - Bilbao, Spain

# LEGAL NOTICE

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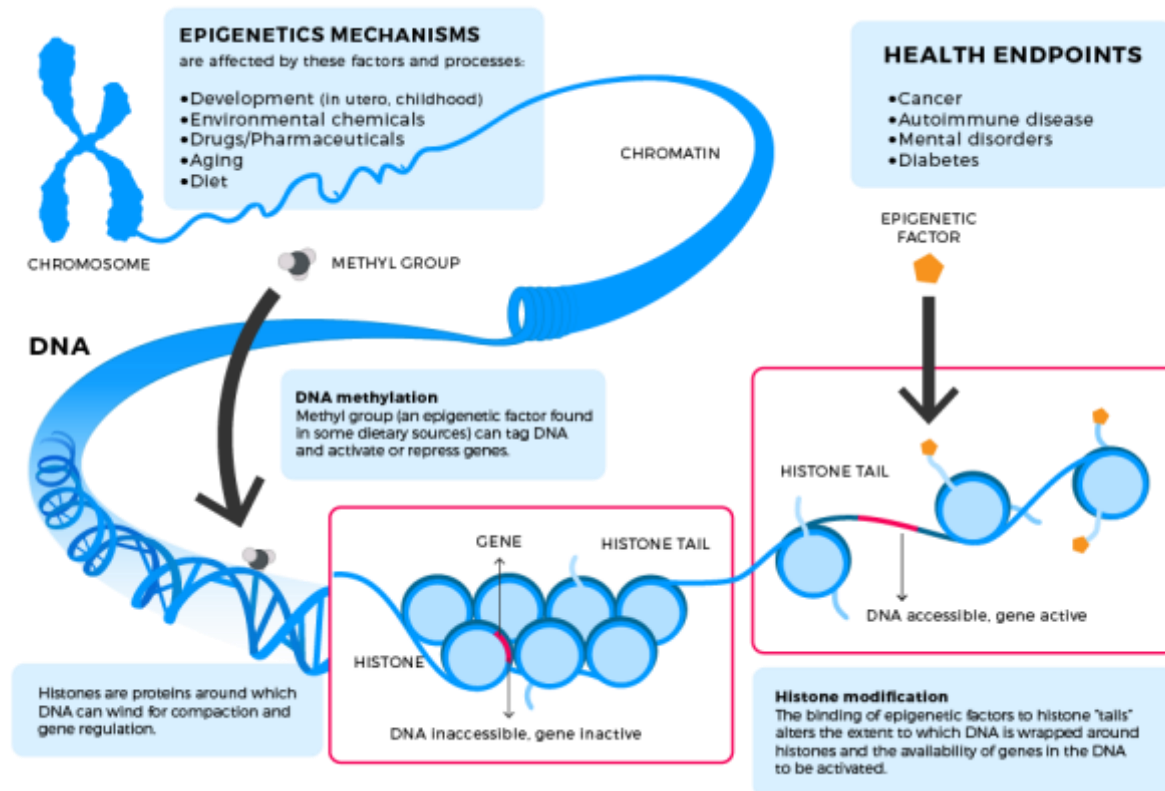
## COMPANY HIGHLIGHTS

- ✓ MADX: ORY A publicly traded company in the Madrid Stock Exchange
- ✓ A clinical stage biopharmaceutical company developing innovative therapies in oncology and neurodegeneration leading the field of Epigenetics
- ✓ A competitive EPIGENETIC Platform with a first program that validates scientifically and clinically the platform
  - ✓ Two therapeutic programs in clinical development with multiple indication opportunities
  - ✓ Additional assets in preclinical development to be progressed quickly
- ✓ Signed global strategic partnership with ROCHE valued at 500M USD
- ✓ Strong IP portfolio with technology developed in-house
- ✓ Raised €27m in the last 12 months. Cash runway till 1H2018



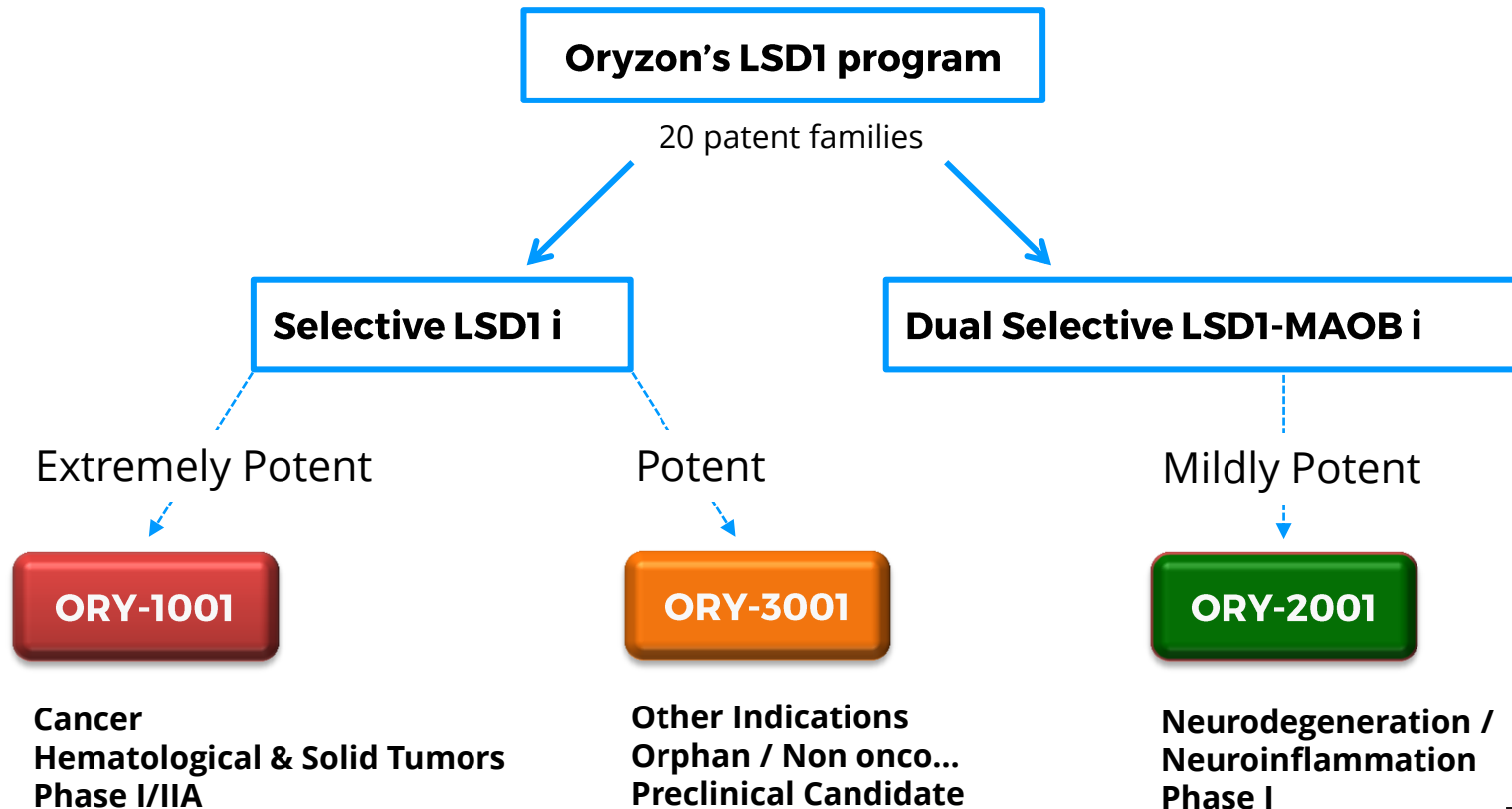
# EPIGENETICS: THE CRITICAL ROLE OF HISTONE CODING

- ✓ **Epigenetics** – the study of heritable changes in genome function that occur without a change in DNA sequence
- ✓ These changes mainly occur due to variations in the structure of chromatin that silence or activate whole regions of the chromosome and all the genes that reside in this region
- ✓ These variations are caused by post-translational modifications on histones, the proteins that serve as scaffold for the DNA to conform the chromatin
- ✓ Lysine methylation and demethylation is one of the key epigenetic modifications of the Histone tails




# The LSD1 PROGRAM: A demonstration of the productivity of our Epigenetic platform

- ✓ LSD1 is an enzyme that demethylates histones: specifically mono and dimethylated H3K4 and H3K9
- ✓ LSD1 belongs to the family of FAD-dependent amine oxidases, which include known CNS drug targets, such as MAO-A and MAO-B
- ✓ The general MAO inhibitor tranylcypromine is a chemical starting point to design LSD1 inhibitors



# EXTENSIVE PIPELINE : 2 PROGRAMS IN CLINIC WITH MULTIPLE INDICATIONS

INDICATION	TARGET	MOLECULE	DISCOVERY	H2L	LEAD OPTIMIZATION	PRECLINICAL	PHASE I-IIA	PHASE IIB	PHASE III	PARTNER
CANCER Leukemia Solid Tumors	LSD1	ORY-1001								
DEMENTIAS Alzheimer's Disease Parkinson's Disease Other Dementias	LSD1-MAOB	ORY-2001								
ORPHAN Huntington's Disease Other Orphan Diseases	LSD1-MAOB	ORY-2001								
OTHER INDICATIONS	LSD1	ORY-3001								
CANCER	Other KDMs									
CANCER	Other Epigenetic Targets									

## ORY-1001:ONCOLOGY PROGRAM

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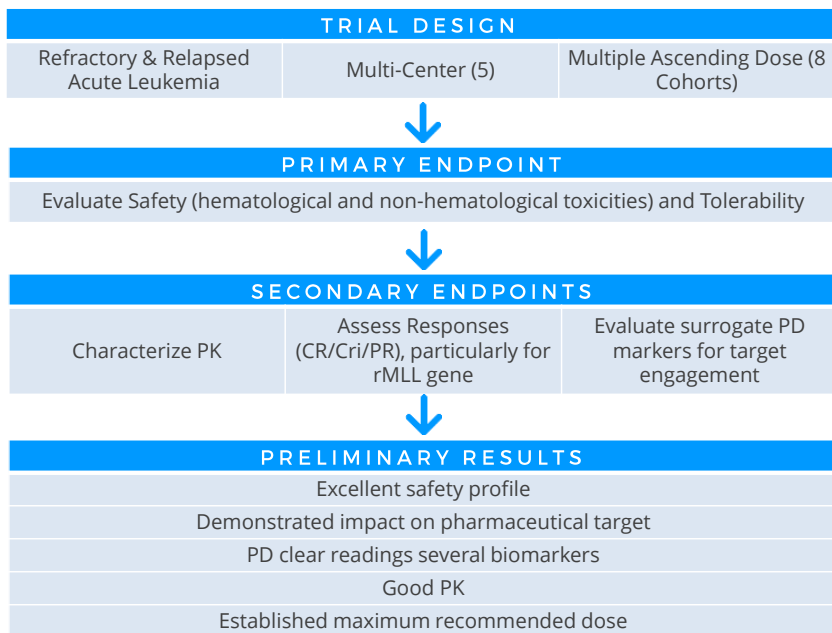
- ✓ LSD1 is a key effector of the differentiation block in MLL leukemia
- ✓ MLL Leukemic stem cells are addicted to LSD1 activity
- ✓ ORY-1001 a highly potent and selective LSD1 inhibitor with orphan drug status granted by the European Medicines Agency (EMA)
- ✓ Currently in Phase I/IIA
  - Completed Part 1 of the study (Phase I) in acute leukemia
  - Extension Arm (Phase II-A) ongoing
- ✓ Potential for additional indications in solid tumors



# PHASE I HIGHLIGHTS: ORY-1001 LEUKEMIA



Licensed to ROCHE in 2014



- ✓ \$23m received in 2014-15
- ✓ +\$500m in future contingent milestones
- ✓ Tiered royalties up to double digit
- ✓ Clinical development and all related investments beyond the ongoing Phase I/IIA trial are the responsibility of ROCHE

After the MRD, a 14 patients Expansion arm (Phase II-A), which included patients with target mutations (MLL and others), has been culminated to evaluate preliminary signs of efficacy



**Expected  
Report  
Preliminary  
Data in ASH  
2016**



### ORY-1001 market capture opportunity above \$1.8 billion

A number of scientific reports point out the potential of LSD1 inhibition as a target in a number of solid tumors

Non oncological diseases as SCD and others may also be a CDP option

#### Acute Myeloid Leukemia

12% of all Blood Cancers  
18.860 new cases in US in  
2014 <sup>1,2</sup>

**Global Mk Potential of \$932  
million in 2024,**  
CAGR of 10.5% <sup>4</sup>

#### Small Cell Lung Cancer

15% of all Lung Cancers  
32.420 new cases in US in  
2014 <sup>1,3</sup>

**Global Mk Potential of \$684  
million in 2017 <sup>5</sup>**

#### Sickle Cell Disease

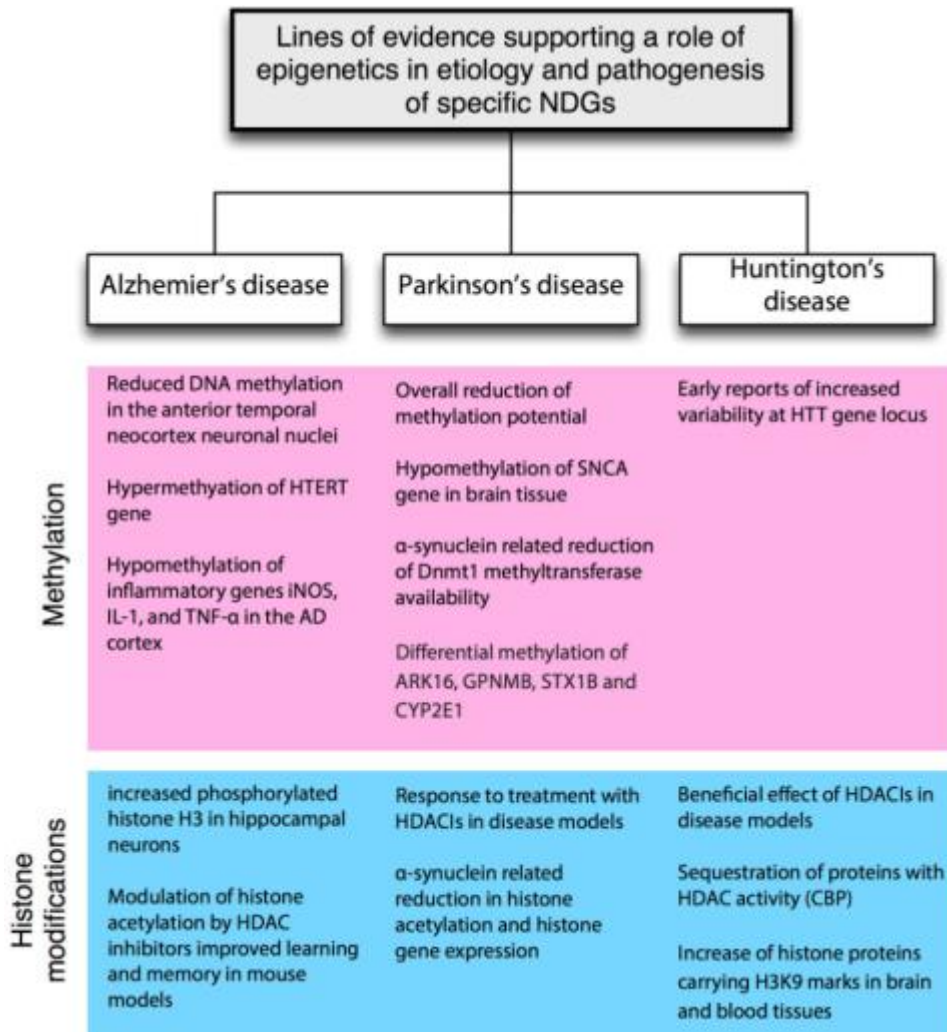
SCD Epidemiology  
US/EU Prevalence ~150K

**US Mk Potential of \$200  
million in 2017,**  
(Market to grow at 17% CGAR till 2019)

**NOTE:** ROCHE is the sole responsible for the further Clinic Development Plan for ORY-1001. The indications and markets mentioned above are only presented on its likelihood based on the development of competitors or published scientific reports

1. ACS, Cancer Facts & Figures 2014
2. [www.hematology.org](http://www.hematology.org)
3. [www.lungcancer.org](http://www.lungcancer.org)
4. Global Data 2015
5. Decision Resources 2015

# ROLE OF EPIGENETICS: NEURODEGENERATIVE DISORDERS



Luca Lovrečić, et al., 2013 *The Role of Epigenetics in Neurodegenerative Diseases*



ENVIRONMENT

GENES

EXPERIENCE

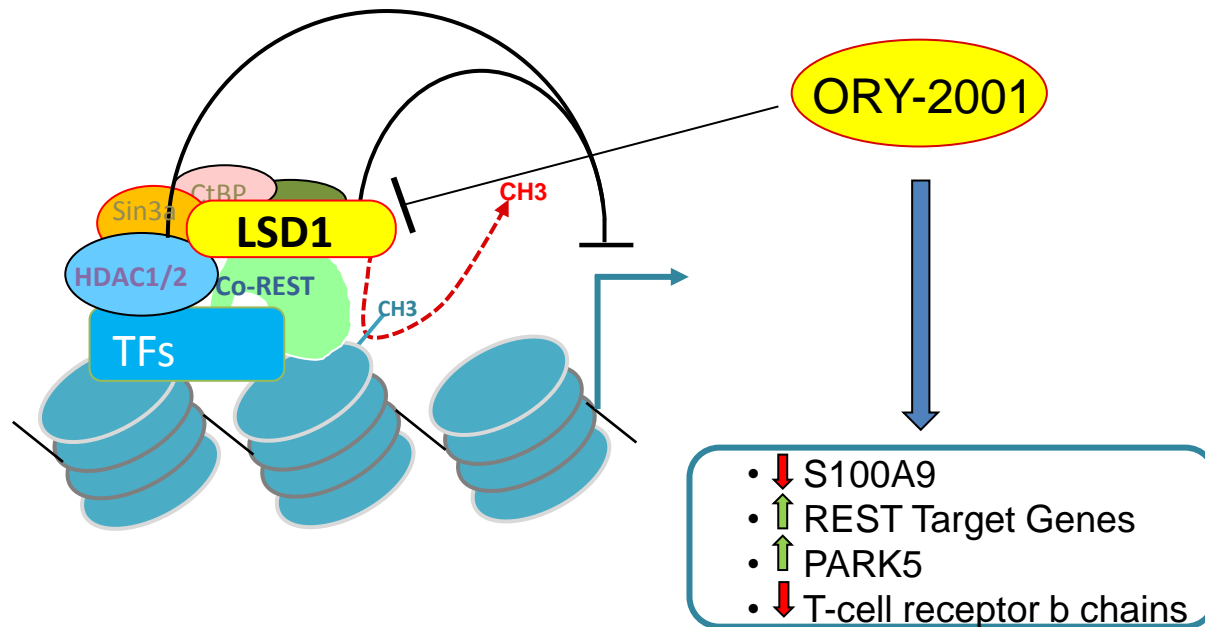


- Identical twins (monozygotic)
- Same DNA with GBA risk mutation
- Discordant for symptoms of Parkinson's
- Up to 20 years difference in onset
- Patient derived iPSCs: difference in MAO-B levels

## LSD1 in the CNS.

ORY-2001 inhibits both LSD1 and MAO-B by irreversible binding to the FAD cofactor

- ✓ LSD1 is a key component of different Transcriptional complexes interacting with different Transcription Factors and very often with HDAC1 and HDAC2.
- ✓ In the Brain one of these TFs is REST. The LSD1-REST-CoREST-HDAC1/2 repressor complex is involved mainly in controlling developmental programs and modulating neuronal morphology in the CNS. Different to what happens in HDACs, it has been proven that it is possible to develop extremely selective LSD1 inhibitors with excellent pharmacological properties
- ✓ LSD1 is known to be an important regulator in the maintenance of pluripotency and in specification of neuronal commitment of pluri- or multipotent cells
- ✓ In *C. elegans*, *Drosophila* and mammalian cells LSD1 suppression has been reported to significantly enhance the removal of misfolded proteins with a critical role on neurodegeneration like SOD1, TDP-43, FUS, and polyglutamine-containing proteins, indicating a general improvement in protein quality control.



## ✓ **Pharmacological Properties**

- ✓ A selective dual LSD1-MAO-B inhibitor
- ✓ Optimal ADMET and PK profiles
- ✓ Crosses efficiently the BBB
- ✓ Once daily oral bioavailable
- ✓ Good pharmaceutical properties
- ✓ Selectivity against MAO-A demonstrated in-vitro and in-vivo
- ✓ High therapeutic window in animals: a safe drug for chronic settings
- ✓ Target engagement demonstrated in vivo

## ✓ **Exclusively owned by Oryzon**

## ✓ **Preclinical Proof of Concept** Achieved in different animal models of:

- ✓ Alzheimer's Disease
- ✓ Huntington's Disease
- ✓ Multiple Sclerosis

## ✓ Other additional indications being explored preclinically

## ✓ **Clinical development → In Phase I:**

LPO expected in Dec2016

- ✓ Alzheimer's Disease is lead indication
- ✓ Potential for additional indications: MS, HD and others

## ✓ **Biomarkers identified**

# SAMP-8 mouse: A model for Alzheimer's Disease



## The senescence accelerated mouse (SAMP8) as a model for oxidative stress and Alzheimer's disease<sup>☆</sup>

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 Blood-brain barrier  
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### ABSTRACT

The senescence accelerated mouse (SAMP8) is a spontaneous animal model of overproduction of amyloid precursor protein (APP) and oxidative damage. It develops early memory disturbances and changes in the blood-brain barrier resulting in decreased efflux of amyloid- $\beta$  protein from the brain. It has a marked increase in oxidative stress in the brain. Pharmacological treatments that reduce oxidative stress improve memory. Treatments that reduce amyloid- $\beta$  (antiserum to APP and antibodies to amyloid- $\beta$ ) not only improve memory but reduce oxidative stress. Early changes in lipid peroxidative damage favor mitochondrial dysfunction as being a trigger for amyloid- $\beta$  overproduction in this genetically susceptible mouse strain. This sets in motion a cycle where the increased amyloid-beta further damages mitochondria. We suggest that this should be termed the Inflammatory-Amyloid Cycle and may well be similar to the mechanisms responsible for the pathophysiology of Alzheimer's disease. This article is part of a Special Issue entitled: Antioxidants and Antioxidant Treatment in Disease.

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## Review Article

### Senescence-Accelerated Mice P8: A Tool to Study Brain Aging and Alzheimer's Disease in a Mouse Model

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The causes of aging remain unknown, but they are probably intimately linked to a multifactorial process that affects cell networks to varying degrees. Although a growing number of aging and Alzheimer's disease (AD) animal models are available, a more comprehensive and physiological mouse model is required. In this context, the senescence-accelerated mouse prone 8 (SAMP8) has a number of advantages, since its rapid physiological senescence means that it has about half the normal lifespan of a rodent. In addition, according to data gathered over the last five years, some of its behavioral traits and histopathology resemble AD human dementia. SAMP8 has remarkable pathological similarities to AD and may prove to be an excellent model for acquiring more in-depth knowledge of the age-related neurodegenerative processes behind brain senescence and AD in particular. We review these facts and particularly the data on parameters related to neurodegeneration. SAMP8 also shows signs of aging in the immune, vascular, and metabolic systems, among others.

## frontiers in AGING NEUROSCIENCE

ORIGINAL RESEARCH ARTICLE  
 published: 29 October 2013  
 doi: 10.3389/fnagi.2013.00065



## Nodes and biological processes identified on the basis of network analysis in the brain of the senescence accelerated mice as an Alzheimer's disease animal model

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<sup>†</sup> These authors have contributed equally to this work.

Harboring the behavioral and histopathological signatures of Alzheimer's disease (AD), senescence accelerated mouse-prone 8 (SAMP8) mice are currently considered a robust model for studying AD. However, the underlying mechanisms, prioritized pathways and genes in SAMP8 mice linked to AD remain unclear. In this study, we provide a biological interpretation of the molecular underpinnings of SAMP8 mice. Our results were derived from differentially expressed genes in the hippocampus and cerebral cortex of SAMP8 mice compared to age-matched SAMR1 mice at 2, 6, and 12 months of age using cDNA microarray analysis. On the basis of PPI, MetaCore and the co-expression network, we constructed a distinct genetic sub-network in the brains of SAMP8 mice. Next, we determined that the regulation of synaptic transmission and apoptosis were disrupted in the brains of SAMP8 mice. We found abnormal gene expression of RAF1, MAPT, PTGS2, CDKN2A, CAMK2A, NTRK2, AGER, ADRBK1, MCM3AP, and STUB1, which may have initiated the dysfunction of biological processes in the brains of SAMP8 mice. Specifically, we found microRNAs, including miR-20a, miR-17, miR-34a, miR-155, miR-18a, miR-22, miR-26a, miR-101, miR-106b, and miR-125b, that might regulate the expression of nodes in the sub-network. Taken together, these results provide new insights into the biological and genetic mechanisms of SAMP8 mice and add an important dimension to our understanding of the neuro-pathogenesis in SAMP8 mice from a systems perspective.

**Keywords:** Alzheimer's disease, senescence accelerated mouse prone 8, molecular network, hippocampus, cerebral cortex, differentially expressed genes, synaptic transmission, apoptosis

Table 1

Comparison of Alzheimer's disease, SAMP8 mouse and transgenic mice models.

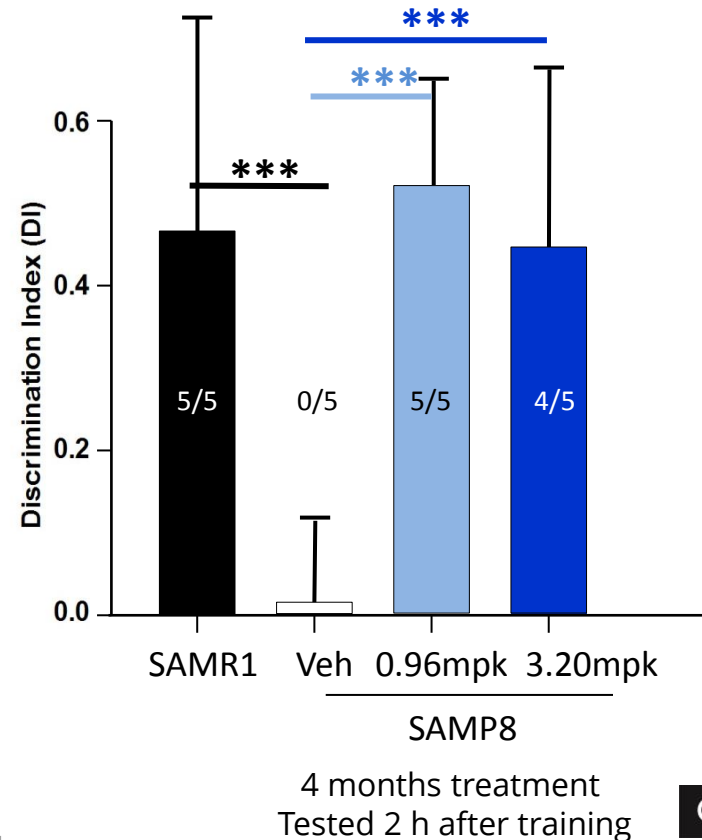
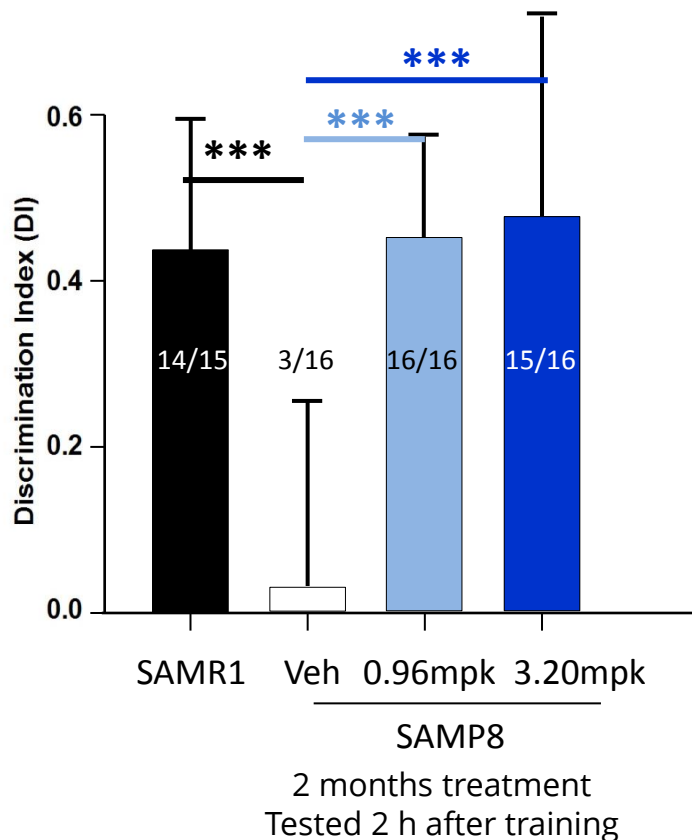
	Alzheimer's disease	SAMP8	Transgenic models
Overproduction of amyloid- $\beta$	Yes	Yes	Yes
Amyloid plaques	Yes	Late <sup>a</sup>	Yes
Phosphorylated tau	Increased	Increased	In some models
Cerebral amyloid angiopathy	Yes	Yes	Yes
Neuron loss	Yes	Yes	?
Synaptic dysfunction	Yes	Yes	Yes
Dendritic spine loss	Yes	Marked	?
Gliosis	Yes	Yes	Yes
Cholinergic deficit	Yes	Yes	Yes
Learning and memory impaired	Yes	Yes	Yes
Circadian rhythm disturbances	Yes	Yes	?
Oxidative damage	Yes	4 months	8 months

? = uncertain.

<sup>a</sup> Occur at 16 to 18 months.

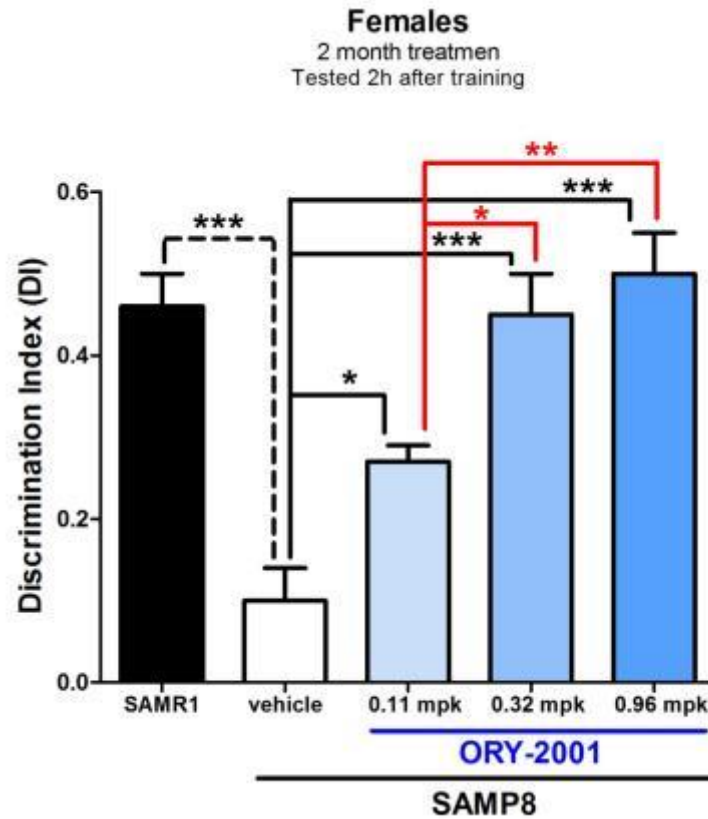
## PoC studies in SAMP8 mice

- ✓ The SAMP8 mouse is an excellent model to examine the pathophysiology of early defects seen in Alzheimer's disease. They develop accelerated aging and senescence and show deficits in learning and memory as well as other similarities to pathology of AD
- ✓ ORY-2001 cognitive effect tested by NORT in five different studies
- ✓ Study 1 (below) After 2 and 4 month of oral treatment, ORY-2001 provides a robust protective effect in the medium and long-term memory of female mice, compared to age-matched SAMP8 mice
- ✓ We lowered dose in males (Study #2)



## PoC studies in SAMP8 mice

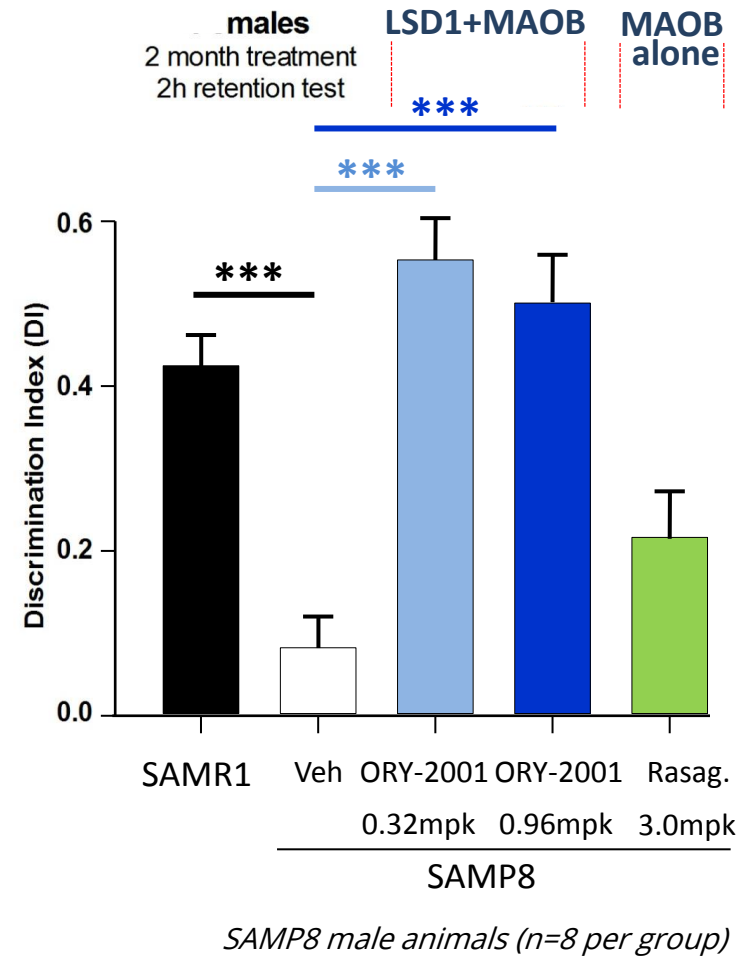
- ✓ ORY-2001 provides a dose dependent protective effect in the medium-term memory of female mice, compared to age-matched SAMP8 mice



## PoC studies in SAMP8 mice

### Dissecting the LSD1 and MAOB components

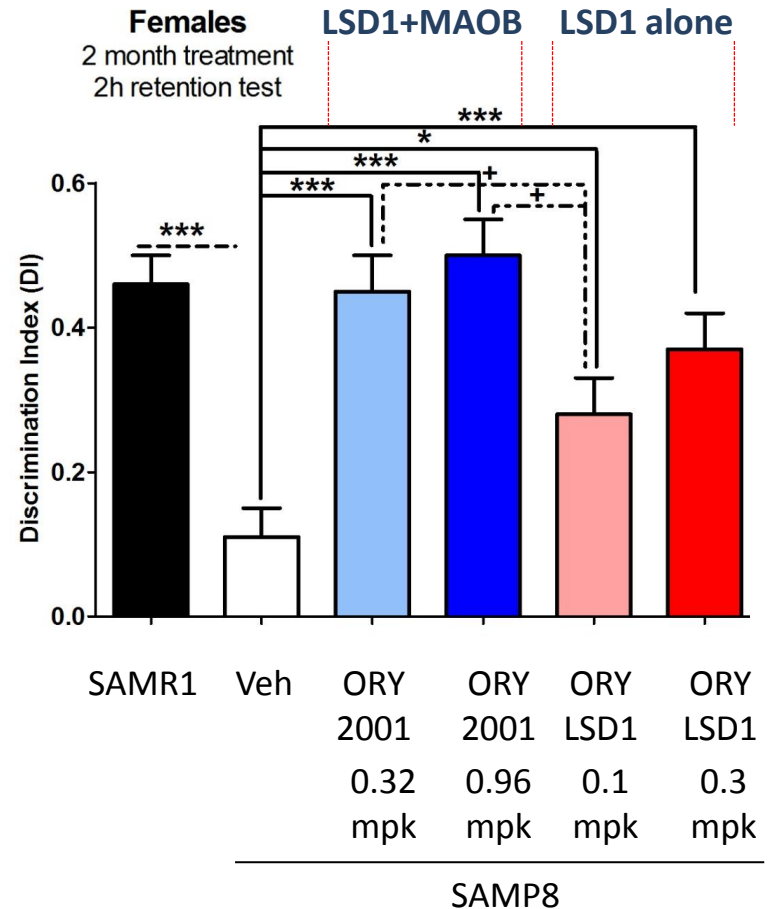
- ✓ MAOB inhibition alone shows a trend on cognitive improvement on the SAMP8 animals but it is not significant
  - $p=0.12$  at 2h
  - $p=0.22$  at 24h
- ✓ LSD1 inhibition is therefore crucial to obtain the recovery on cognitive improvement on the SAMP8 animals





## Dissecting the LSD1 and MAOB components

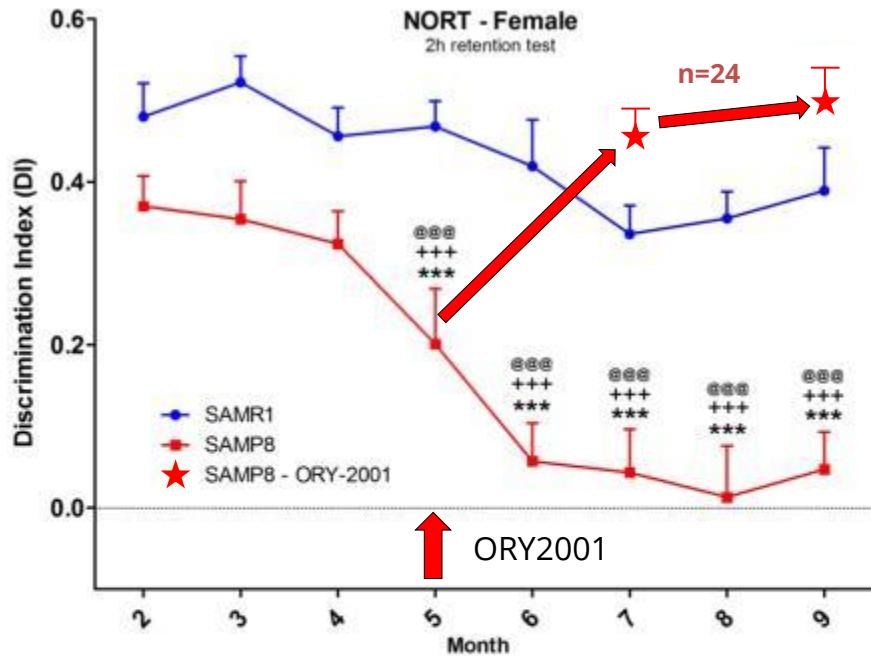
- ✓ ORY-2001 provides a robust protective effect in the medium and long-term memory of mice, compared to age-matched SAMP8 mice
- ✓ LSD1 inhibition alone is also able to produce an effect but less pronounced
- ✓ Protection is driven by the LSD1 inhibition and not by MAO-B, **but the combination with MAO-B inhibition (i.e. a dual compound, ORY-2001) enhances the effect**



*SAMP8 female animals (n=8 per group)*

# ORY-2001: A possible disease modifier drug

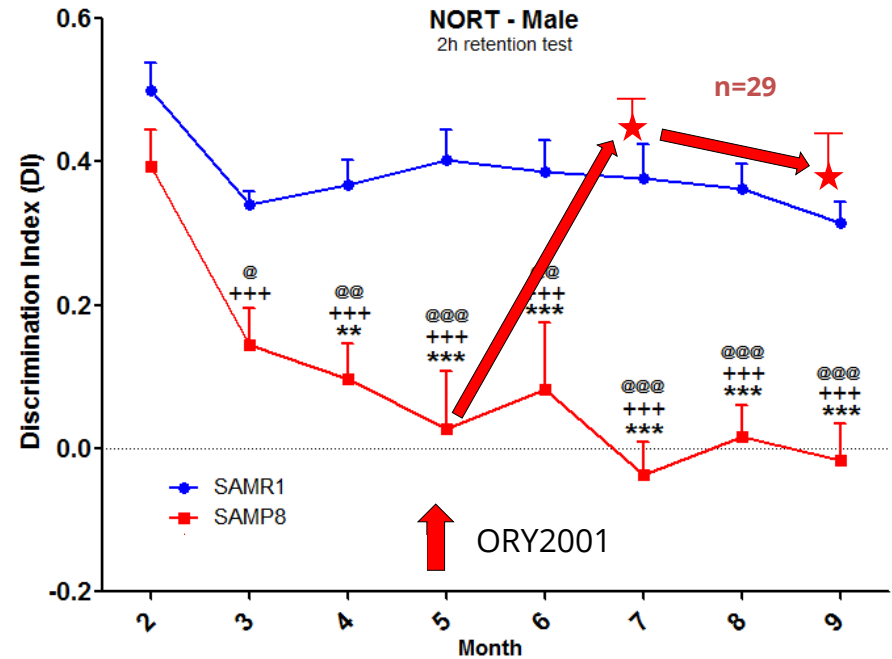
Meta-analysis of cognitive deficit of untreated SAMP-8 mice (historical data)



SAMP8 cognitive deficit compared to SAMR1 start to be significant from month 5. \*\*\*  $p < 0.001$  two-way ANOVA (Genotype vs. Age;  $n = 15$  genotype/month)

SAMP8 animals treated with ORY-2001 for 2 months have restored cognitive function compared to control SAMP8 of 5-9 months. +++  $p < 0.001$  two-way ANOVA (Treatment vs control; treated group  $n = 24$ )

SAMP8 animals treated with ORY-2001 for 4 months have restored cognitive function compared to control SAMP8 of 5-9 months. @@@  $p < 0.001$  two-way ANOVA (Treatment vs control; treated group  $n = 10$ )



SAMP8 cognitive deficit compared to SAMR1 start to be significant from month 4. \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$  two-way ANOVA (Genotype vs. Age;  $n = 15$  genotype/month)

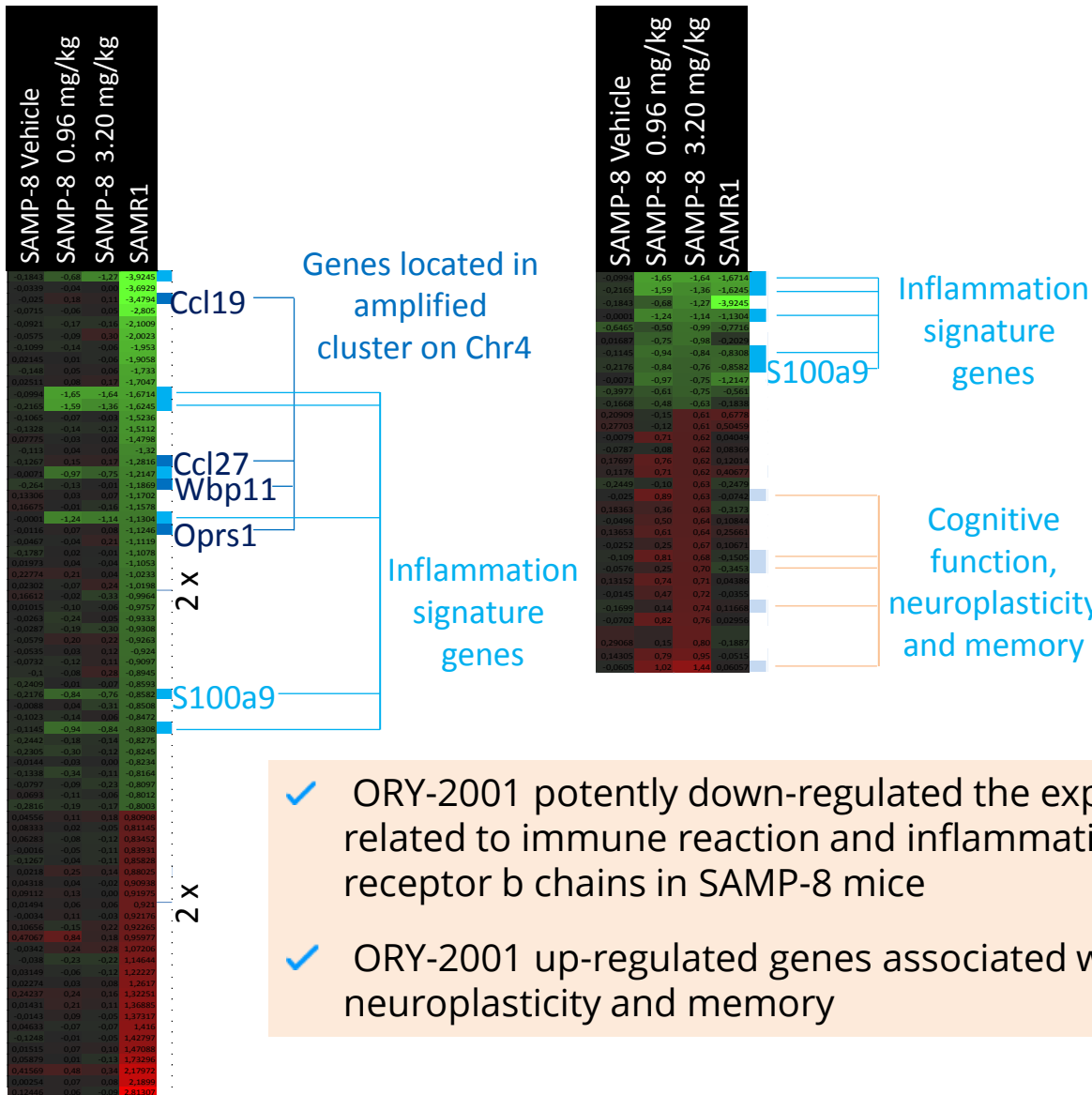
SAMP8 animals treated with ORY-2001 for 2 months have restored cognitive function compared to control SAMP8 of 3-9 months. +++  $p < 0.001$  two-way ANOVA (Treatment vs control; treated group  $n = 29$ )

SAMP8 animals treated with ORY-2001 for 4 months have restored cognitive function compared to control SAMP8 of 3-9 months. @  $p < 0.05$ ; @@  $p < 0.01$ ; @@@  $p < 0.001$  two-way ANOVA (Treatment vs control; treated group  $n = 10$ )

**ORY-2001 restores the discrimination index in SAMP-8 mice**

# PoC studies in SAMP8 mice - BIOMARKERS

We have identified different Hippocampal **biomarkers** upon ORY-2001 treatment:



<50 genes up or down-regulated by > 2-fold female SAMP-8 vs SAMR1 (see also Carter *et al.*)

Chr 4 cluster including *Cc/19* and *Cc/27* is amplified and over-expressed SAMP-8 vs SAMR1 mice

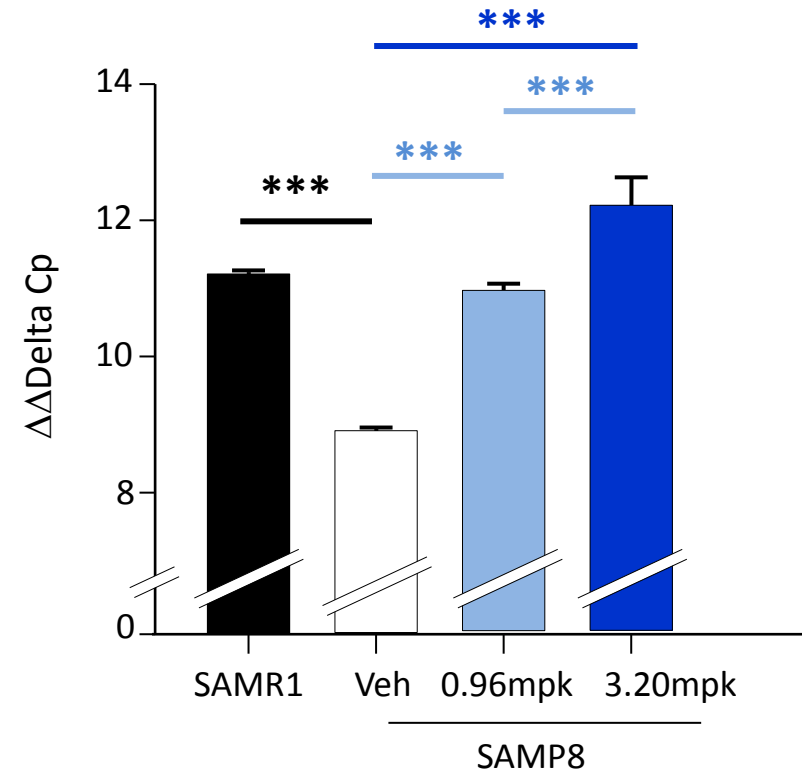
Inflammation genes upregulated in SAMP-8 vs SAMR1 mice

- ✓ ORY-2001 potentially down-regulated the expression of a subset of genes related to immune reaction and inflammation, including S100A9 and T-cell receptor b chains in SAMP-8 mice
- ✓ ORY-2001 up-regulated genes associated with improved cognitive function, neuroplasticity and memory

## ORY-2001 - PROOF OF CONCEPT IN SAMP8 MICE

**BIOMARKERS** : We have identified different biomarkers upon ORY-2001 treatment:

- ✓ Down-regulation of the pro-inflammatory S100A9 protein by ORY-2001 is particularly interesting, since S100A9 is emerging as an important contributor to inflammation-related neurodegeneration
- ✓ S100A9 was found to be increased in
  - ✓ patients with AD
  - ✓ postoperative cognitive dysfunction (POCD)
  - ✓ and traumatic brain injury (TBI)
- ✓ Knockout or knockdown of S100A9 has been shown to be beneficial to memory in APP/PS1 and Tg2576 models of Alzheimer's disease
- ✓ S100A9 belongs to the family of calcium-binding S100 proteins.
- ✓ It is expressed in granulocytes and at early stages of monocyte differentiation.
- ✓ Complexes of S100A8 and S100A9 (S100A8/A9) are expressed and released at inflammatory sites.
- ✓ **A correlation between serum levels of S100A8/A9 and disease activity has been observed in many inflammatory disorders.**



# ORY-2001 a possible approach to treat Multiple sclerosis

**Experimental Autoimmune Encephalitis (EAE)** mice model is a model in which S100A9 has been described to be upregulated

## This model is considered a meaningful model for Multiple Sclerosis

To determine the efficacy of ORY-2001 following oral gavage administration for 2 consecutive weeks in mice.

### Method:

**Female C57BL/6 mice**

**G1 : Vehicle Control**

**G2 : ORY-2001 1.0 mg/Kg , p.o.**

**G3 : ORY-2001 3.0 mg/Kg , p.o.**

### Parameter to asses:

Body weight

Clinical score

Inflammatory response

Autoimmune response

### Clinical score:

0.0, no clinical signs

0.5, partial loss of tail tonicity

1.0, complete loss of tail tonicity

2.0, flaccid tail and abnormal gait

3.0, hind leg paralysis

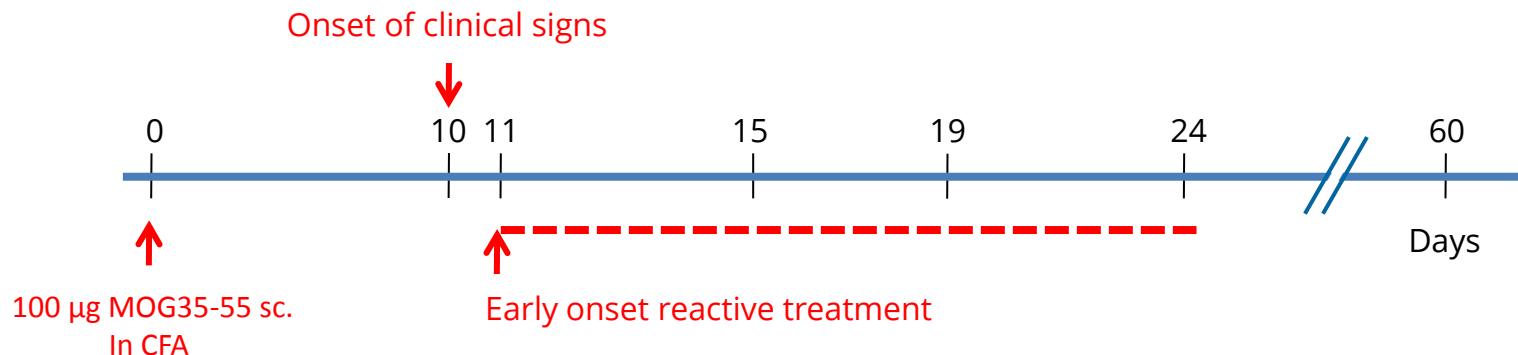
4.0, hind leg paralysis with hind body paresis

5.0, hind and fore leg paralysis

6.0, death



C57BL/6 mice  
(Six-week old)



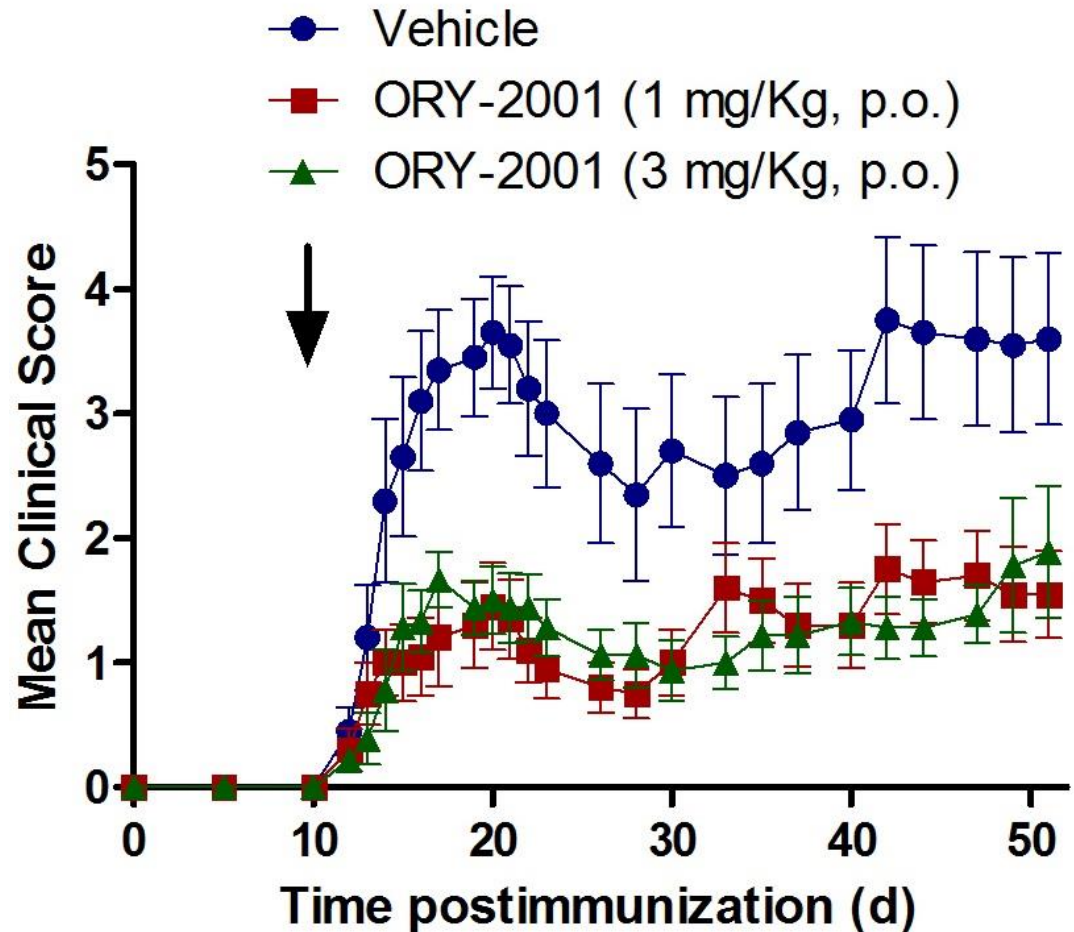
# ORY-2001 a possible approach to treat Multiple sclerosis

## Multiple Sclerosis (Experimental Autoimmune Encephalitis (EAE) mice model)

- ✓ Treatment with ORY-2001 during the effector phase of the disease greatly inhibited the development of EAE and reduced disease incidence and severity

### ORY-2001 is protective in EAE model

- ✓ All controls developed the disease (from day 14 post immunization), while many of ORY-2001 treated animals remained with no symptoms
- ✓ As EAE model is considered a validated preclinical model of the chronic progressive form of multiple sclerosis, ORY-2001 emerges as a new candidate to treat this disorder



## ORY-2001 may be an effective therapeutic agent on Multiple Sclerosis

- ✓ The company is working actively on:
  - ✓ Dissecting the Molecular MoA
  - ✓ Defining the adequate dose scheme
  - ✓ Identifying additional biomarkers
- ✓ ORY-2001 will be PHASE II ready on 1H2017
- ✓ We have analyzed the data with different KOLs and we have got positive feedback regarding the significance of the data
- ✓ We have incorporated Dr. Xavier Montalban, a world known KOL in MS, on the Scientific Advisory Board of the company
- ✓ We are designing a PHASE-IB/IIA Clinical Study to eventually complement the CDP

### Professor Xavier Montalban, M.D., PhD



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Vall d'Hebron University Hospital  
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Vice-president  
Fundació Esclerosi Múltiple  
www.fem.es

Chairman International Medical  
& Scientific Board  
Multiple Sclerosis  
International Federation  
www.msif.org

Scientific Committee & Board Member  
European Charcot Foundation  
www.charcot-ms.org

Professor of Neurology  
Neuroimmunology Chair Director  
Faculty of Medicine  
Universitat Autònoma de Barcelona  
www.uab.cat

Co-Editor /  
Editor for Clinical Cases  
Multiple Sclerosis Journal  
msj.sagepub.com

Multiple Sclerosis Area Director  
Revista de Neurologia

Orcid

0000-0002-0098-9918

Professor Xavier Montalban obtained his MD at the Universitat Autònoma de Barcelona, Spain, where he completed as well his PhD in Neuroimmunology. He undertook a postdoctoral fellowship at the Lupus Research Institute, Guy's & St.Thomas' Hospital plus additional clinical training at the National Hospital for Neurology and Neurosurgery, Queen Square in London, United Kingdom. Currently he is Chairman of the Department of Neurology-Neuroimmunology at Vall d'Hebron University Hospital and Director of the Multiple Sclerosis Centre of Catalonia, in that same Hospital, where he is chief of the Neuroimmunology Research Group at the Vall d'Hebron Research Institute. He is Professor of Neurology at the Universitat Autònoma de Barcelona.

Prof. Xavier Montalban's research has been dedicated to identify two key elements that have proven to be the cornerstone of Multiple Sclerosis disease management to the present day; biological, imaging and clinical markers of (i) disease prognosis and (ii) response to treatment. This has been possible thanks to a patient centered approach on a holistic approach with care and excellence driven tools. In this light, Prof. Montalban's team identified in 1995 two important patient populations that would transform the knowledge of MS and its approaches to treatment. The cohort with first episodes suggestive of MS together with patients who had started treatment with the first drugs available. These findings were fundamental to identify features that were to become part of the diagnostic criteria of MS, named after Prof. Ian McDonald, elucidating the nature and course of first episodes suggestive of MS. The group were also pioneers in obtaining valid results on biomarkers for early detection of the disease and to determine which patients would respond well to therapy. In fact, the most commonly used treatment response criteria (Rio score) comes from this group.

Dr. Montalban's leadership has fostered other top class researchers such as Dr. Tintoré, Dr. Río, Dr. Comabella, Dr. Sastre-Garriga, Dr. A. Rovira, and others. He has created solid research collaborations with international groups in the United Kingdom, France, Italy, Germany, Spain and the USA. This is shown in the NIH grant with Prof. Oksenberg's of UCSF searching for biomarkers, over ten EU grants (FW7, Marie-Curie....).

## ORY-2001 DEVELOPMENT TIMELINE

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A Phase I study currently ongoing with 88 healthy volunteers, young and elderly.

**Phase I, single center, double blind, parallel,  
ascending single and multiple dose trial.**

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**TITLE:** A Study to Assess the Safety, Tolerability and Pharmacokinetic of Single and Multiple Oral Doses of ORY-2001 in Healthy Male, Female Subjects and Elderly Population

**STUDY CODE:** CL01-ORY-2001

**EUDRACT NUMBER:** 2015-003721-33

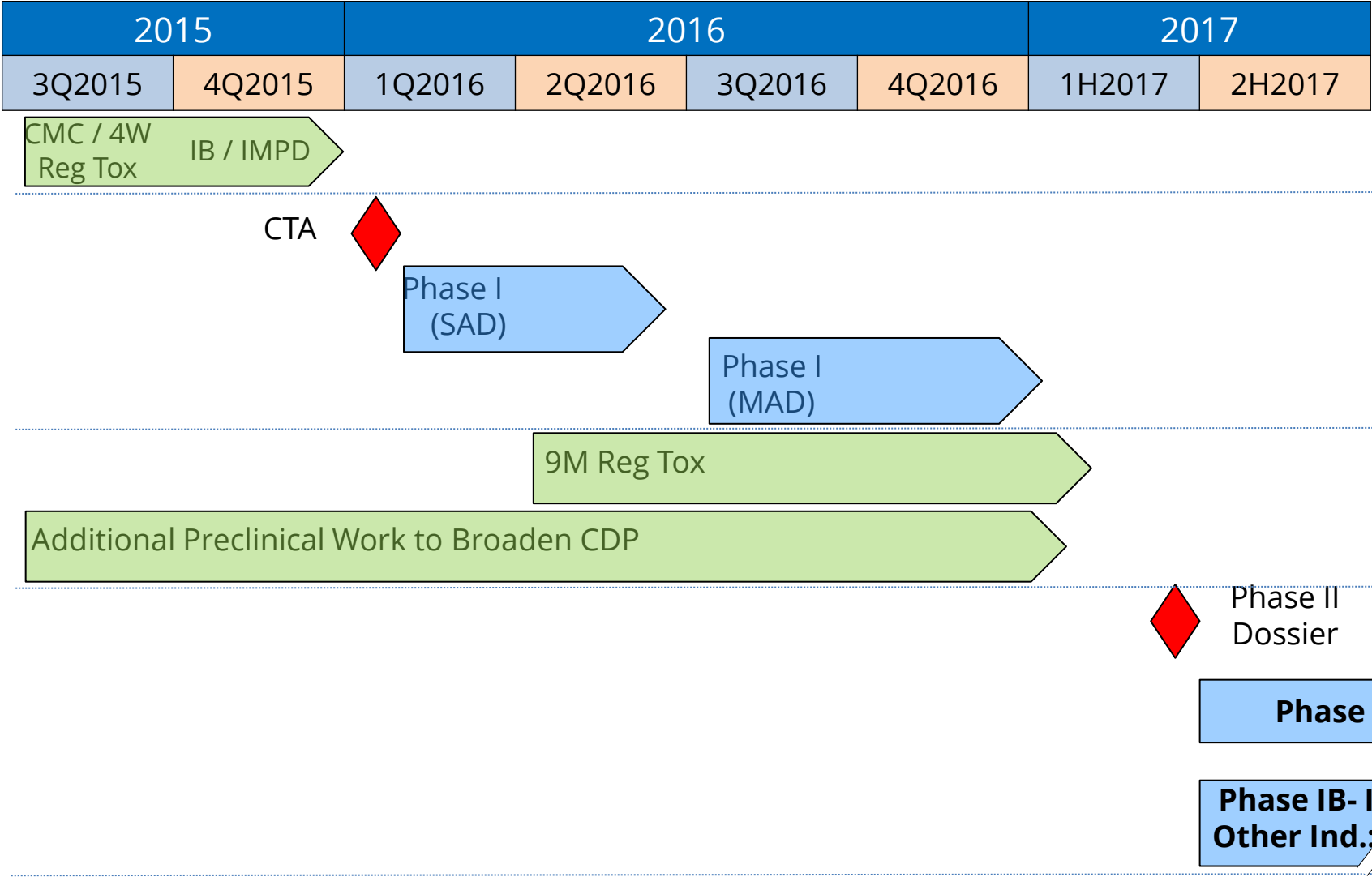
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**Phase I Clinical Trial** in young and elderly healthy volunteers

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# ORY-2001 DEVELOPMENT TIMELINE



# ORY-2001 CLINICAL & MARKET POTENTIAL

## ORY-2001 market capture opportunity above \$3 billion.

Further development may include Neuro-inflammatory disorders

### ALZHEIMER'S DISEASE

5.4 M people currently affected in US. By 2025 the number of patients will rise to 7.1 million in USA<sup>1</sup>  
8.7 million Europeans are also affected<sup>2</sup> and in Asia another potential 10 to 12 million people are diagnosed or suspected to suffer AD.

**Drug market projected to reach US \$9.5 billion by 2017<sup>6</sup>**

### HUNTINGTON'S DISEASE

Worldwide prevalence of HD is 5–10 cases per 100,000 persons. There are around 30,000 symptomatic Americans and more than 200,000 at-risk of inheriting the disease<sup>5</sup>  
Up to 71,000 patients in Europe.

**Drug market projected to reach US\$1.3 billion by 2020<sup>7</sup>**

### MULTIPLE SCLEROSIS

The overall MS market in the U.S. and EU5 is very large at an estimated ~\$17B. This is expected to grow to **\$20.0 billion in 2024**, at a compound annual growth rate (CAGR) of **1.5%..**; even a small share results in high returns<sup>8</sup>

1. Alzheimer's association [www.alz.org](http://www.alz.org)
2. Alzheimer Europe [www.alzheimer-europe.org](http://www.alzheimer-europe.org)
3. European Parkinson's Disease Association <http://www.epda.eu.com/>
4. American Parkinson Disease Association <http://www.apdaparkinson.org/>,  
<http://www.ninds.nih.gov/>
5. <http://www.huntington-assoc.com/>
6. <http://www.fiercebiotech.com/>
7. <http://www.strategyr.com>
8. Global Data

# ORY-3001 - the third program of the company

ORY-3001: a third proprietary molecule for orphan diseases



Markets | Tue Jul 5, 2016 2:12am EDT

Related:

## BRIEF-Oryzon Genomics names new compound for preclinical development



Oryzon Genomics SA :

\* Names ORY-3001, a specific inhibitor of LSD1, as a candidate for preclinical development for non-oncology indications Source text for Eikon:

Further company coverage: (Gdynia Newsroom)



### Orphan Disease

Prevalence US ~100.000

Mk Potential US \$200

## FINANCIAL HIGHLIGHTS

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- ✓ €32m raised in the last 12 months (equity+debt)
- ✓ Strong balance sheet with €+30m in cash at the end of 1H-2016
- ✓ \$5 million payment from ROCHE in 2015 (\$23m total received in the period 2014-15)
- ✓ Secured €2.6M in public aids in 2015
- ✓ €20M in debt with low interest rates
  - Repayment terms over either 3-4y or 8-10y (commercial loans or Public R&D loans)
  - Rates from 0-3% (average cost of debt <2%)
  - 1Q-2016: 10.5M non-senior, non-secured debt in 1Q 2016 4-5y term at rates between 1.5%-3.5%
- ✓ Current cash burn of €12M annually
- ✓ Raised only €31 M in equity since inception
- ✓ Spanish GAAP rules adapted partially to IFRS and in readiness for Nasdaq
- ✓ Accounts audited by Grant Thornton since 2003
- ✓ 35 employees (40 expected by the year's end)

## CATALYSTS 2016

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### ✓ ORY-1001: LEAD CANCER ASSET

- Complete Phase IIA and report target efficacy
- Roche execute ongoing clinical development plan

### ✓ ORY-2001: LEAD CNS ASSET

#### ✓ Begin Phase I patient enrolment

- Complete Phase I dosing safety study in healthy volunteers
- Layout of a multiple Phase II clinical study including potential additional indications

### ✓ ORY-3001:

#### ✓ Nomination of Preclinical Candidate

### ✓ CORPORATE

- Prepare to Dual List on the NASDAQ in the future



**THANK YOU VERY MUCH!**

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