Jonathan Aschoff, Ph.D., (646) 616-2795
jaschoff@roth.com

Sales (800) 933-6830, **Trading** (203) 861-9060

COMPANY NOTE | EQUITY RESEARCH | February 27, 2023

Healthcare: Biotechnology **Company Update**

Oryzon Genomics SA | ORY.SM - €2.48 - MADRID | *Buy*

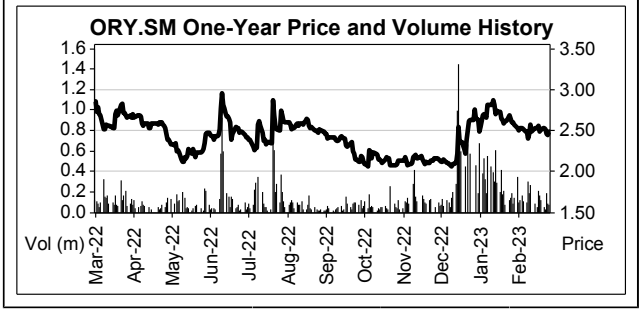
Stock Data	
52-Week Low - High	€1.98 - €3.06
Shares Out. (mil)	56.31
Mkt. Cap.(mil)	€139.65
3-Mo. Avg. Vol.	283,761
12-Mo.Price Target	€15.00
Cash (mil)	$22.7
Tot. Debt (mil)	$23.3

Revenue ($ millions)

Yr Dec	—2022—	—2023E—	—2024E—
		Curr	Curr
1Q	0.0A	0.0E	-
2Q	0.0A	0.0E	-
3Q	0.0A	0.0E	-
4Q	0.0A	0.0E	-
YEAR	0.0A	0.0E	0.0E

EPS $

Yr Dec	—2022—	—2023E—	—2024E—
		Curr	Curr
1Q	(0.03)A	(0.06)E	-
2Q	0.01A	(0.06)E	-
3Q	(0.01)A	(0.08)E	-
4Q	(0.05)A	(0.09)E	-
YEAR	(0.08)A	(0.29)E	(0.60)E
P/E	NM	NM	NM



ORY: KOL Call Highlights the Most Advanced Trials for Vafidemstat & Iadademstat

ORY held a KOL call with multiple experts today covering the ongoing Phase 2b PORTICO trial evaluating vafidemstat in BPD, and the Phase 2 AML program evaluating iadademstat (completed ALICE trial in front-line AML, ongoing FRIDA trial in rel/ref AML). In 2023, we look forward to the PORTICO interim analysis and preliminary FRIDA and NET trial data. A Phase 1/2 trial in Kabuki syndrome for vafidemstat, and a trial for iadademstat in extensive disease SCLC, should also begin in 2023.

- **Vafidemstat.** The Phase 2b PORTICO trial is a key value driver for ORY. PORTICO has a pre-defined interim analysis in 1Q23 on the first 90 patients that have concluded at least 2/3 of the trial, and we note that 85 of the 90 patients have already crossed this threshold. The unblinded analysis exists to adjust the sample size in case of excessive variability around the endpoints or an unexpectedly high placebo rate such that an 80-85% statistical power is maintained, and it also serves as a futility analysis. BPD is an area of clear unmet need, given the high 10% rate of suicide in this population, in addition to the extensive amount of non-fatal harm such as self-mutilation that occurs. Extensive off-label drug use essentially attempts to deal with patients symptom by symptom, but antipsychotics have generally been unsuccessful in BPD trials. PORTICO is enrolling a real world patient population, with few exclusions based on comorbidities, concomitant medications, or psychotherapy. At present there are 14 actively recruiting, and two pending, European and U.S. sites, at which 208 patients have been screened and 130 have been enrolled. PORTICO has already undergone four blinded safety assessments, with no noteworthy safety concerns. Among six severe adverse events, only one (change in sense of taste) was deemed to be even possibly related to the drug, but given the blinded safety assessment, these could be from placebo or vafidemstat patients. Three of the six led to study withdrawal, and the other three led to treatment disruption. As for the lower severity safety concerns, almost all recovered or resolved.

- The KOLs commenting on PORTICO agreed that antipsychotic use in BPD often leads to polytherapy because the absence of effective BPD drugs leaves physicians just treating a patient's individual symptoms as best they can. Physicians are often simply trying to calm patients down and help with sleep, but there is a substantial side effect price to pay for those benefits, such as weight gain, metabolic syndrome, cholesterol increase, and sexual symptoms. The KOLs are looking for PORTICO to safely demonstrate that vafidemstat can reduce agitation and aggression in these “emotional burn” victims, while enhancing mood and fighting patients' feelings of emptiness, so BPD patients act out less frequently. They claimed that no drug can give even a 10-20% relief from these symptoms. *(text continued on page 2)*

- **Iadademstat.** Regarding iadademstat in AML, we have already extensively written up the final results for the ALICE trial, and the ongoing FRIDA trial in rel/ref AML is likely ORY's fastest route to market and the FLT3 mutated population it is enrolling represents about one-third of rel/ref AML. We note that gilteritinib (used as combination therapy along with iadademstat in FRIDA given the drug synergy observed in preclinical studies) is approved in this specific AML setting, and that the combination therapy is an attempt to further improve patient outcome compared to gilteritinib, which only delivers a 2.8 month PFS, CR/CRi rate of 34%, and median OS that was 9.3 months versus salvage chemotherapy OS of 5.6 months.

VALUATION

Our 12-month price target of €15, is based on a DCF analysis using a 40% discount rate that is applied to all cash flows and the terminal value, which is based on a 4x multiple of our projected 2030 operating income of $1.04 billion. We arrive at this valuation by projecting future revenue from vafidemstat in borderline personality disorder and Kabuki syndrome, as well as iadademstat in AML and SCLC.

Factors that could impede shares of ORY.SM from achieving our price target include vafidemstat and iadademstat failing to generate statistically significant clinical results. Also, regulatory agencies could fail to approve these drugs even if pivotal clinical trials are statistical successes, due to the agency viewing the results as not clinically meaningful. Loss of key management personnel could also impede achieving our price target, as could smaller than projected commercial opportunity due to changes in market size, competitive landscape, and drug pricing and reimbursement.

RISKS

- Clinical risk. ORY.SM's clinical staged products could fail to deliver statistically significant results in late-stage clinical trials, substantially reducing the value of ORY.SM's product candidates and therefore our target price.
- Regulatory risk. Even if successful in the clinic, ORY.SM's products could fail to be approved by domestic and/or foreign regulatory bodies, which would reduce ORY.SM’s value and therefore our target price.
- Financing risk. ORY.SM will need additional capital to fund its operations, and such financing may not occur or it could be substantially dilutive to existing investors.
- Competitive risk. For any future approved ORY.SM products, they may not be well adopted in a competitive marketplace, which would adversely affect ORY.SM's value and therefore our target price.
- High stock price volatility. This issue is common among small-cap biotechnology companies with relatively low trading volumes.

COMPANY DESCRIPTION

Founded in 2000 in Barcelona, Spain, Oryzon (ISIN Code: ES0167733015) is a clinical stage biopharmaceutical company considered as the European leader in epigenetics. Oryzon has one of the strongest portfolios in the field, with two LSD1 inhibitors, iadademstat and vafidemstat, in Phase II clinical trials, and other pipeline assets directed against other epigenetic targets. In addition, Oryzon has a strong platform for biomarker identification and target validation for a variety of malignant and neurological diseases.

Oryzon Genomics SA
Income Statement
Fiscal Year ends December
(in 000, except per share items)

Jonathan Aschoff, Ph.D. (646) 616-2795
jaschoff@roth.com

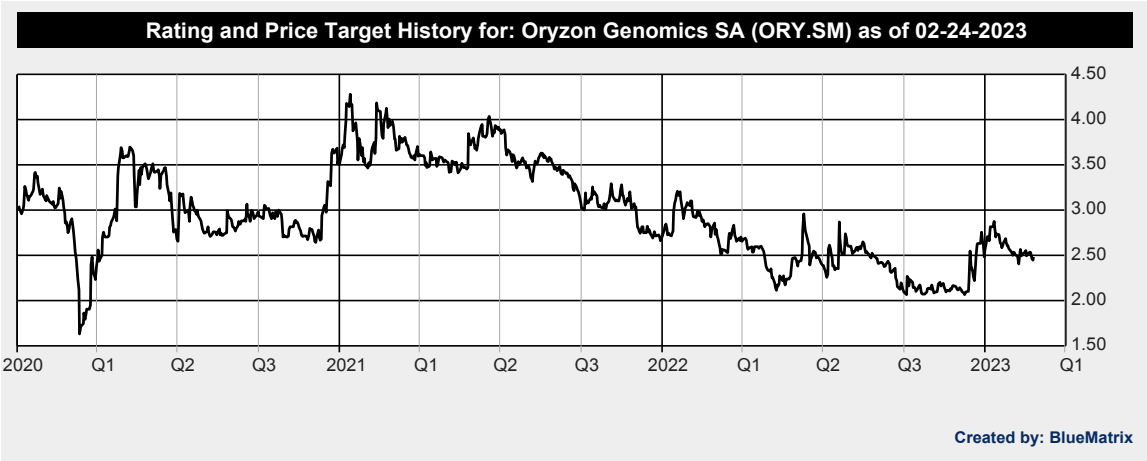
	2017A	2018A	2019A	2020A	2021A	1Q22	2Q22	3Q22	4Q22	2022A	1Q23E	2Q23E	3Q23E	4Q23E	2023E	2024E
Global iadademstat revenue																
Global vafidemstat revenue																
Collaboration revenue	20															
Total revenue	**20**															
Cost of revenue																-
R&D	6,363	8,489	12,647	13,591	15,118	4,228	4,166	4,274	5,033	17,701	5,184	5,340	5,500	5,665	21,688	27,110
G&A	4,502	2,993	3,176	3,484	5,529	1,343	1,520	659	1,249	4,771	1,261	1,274	1,287	1,300	5,122	11,269
Total operating expenses	**10,865**	**11,482**	**15,823**	**17,075**	**20,647**	**5,571**	**5,686**	**4,933**	**6,282**	**22,472**	**6,445**	**6,614**	**6,787**	**6,964**	**26,810**	**38,379**
Operating income	**(10,845)**	**(11,482)**	**(15,823)**	**(17,075)**	**(20,647)**	**(5,571)**	**(5,686)**	**(4,933)**	**(6,282)**	**(22,472)**	**(6,445)**	**(6,614)**	**(6,787)**	**(6,964)**	**(26,810)**	**(38,379)**
Other income (net)	5,659	8,143	11,522	11,805	12,510	3,826	3,894	4,248	4,693	16,661	3,000	3,000	2,000	2,000	10,000	
Net income (pretax)	**(5,186)**	**(3,339)**	**(4,301)**	**(5,269)**	**(8,137)**	**(1,745)**	**(1,792)**	**(685)**	**(1,589)**	**(5,811)**	**(3,445)**	**(3,614)**	**(4,787)**	**(4,964)**	**(16,810)**	**(38,379)**
Net financial & tax	1,047	(1,991)	(187)	(1,098)	(2,760)	67	(2,139)	(67)	863	(1,276)	(250)	(250)	(250)	(250)	(1,000)	(1,100)
Net income	**(6,233)**	**(1,348)**	**(4,114)**	**(4,171)**	**(5,377)**	**(1,812)**	**347**	**(618)**	**(2,452)**	**(4,535)**	**(3,195)**	**(3,364)**	**(4,537)**	**(4,714)**	**(15,810)**	**(37,279)**
EPS basic	**(0.20)**	**(0.04)**	**(0.10)**	**(0.08)**	**(0.10)**	**(0.03)**	**0.01**	**(0.01)**	**(0.05)**	**(0.08)**	**(0.06)**	**(0.06)**	**(0.08)**	**(0.09)**	**(0.29)**	**(0.60)**
EPS diluted	**(0.20)**	**(0.04)**	**(0.10)**	**(0.08)**	**(0.10)**	**(0.03)**	**0.01**	**(0.01)**	**(0.05)**	**(0.08)**	**(0.06)**	**(0.06)**	**(0.08)**	**(0.09)**	**(0.29)**	**(0.60)**
Basic shares outstanding	31,711	34,638	41,589	49,235	52,762	52,762	52,762	53,609	54,284	53,354	54,338	54,393	54,447	54,502	54,420	62,583
Diluted shares outstanding	31,711	34,638	41,565	49,235	52,762	52,762	52,762	53,609	54,284	53,354	54,338	54,393	54,447	54,502	54,420	62,583

Source: SEC filings, company press releases, and ROTH MKM

Regulation Analyst Certification ("Reg AC"): The research analyst primarily responsible for the content of this report certifies the following under Reg AC: I hereby certify that all views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

Disclosures:

Shares of Oryzon Genomics SA may be subject to the Securities and Exchange Commission's Penny Stock Rules, which may set forth sales practice requirements for certain low-priced securities.



Each box on the Rating and Price Target History chart above represents a date on which an analyst made a change to a rating or price target, except for the first box, which may only represent the first note written during the past three years. **Distribution Ratings/IB Services** shows the number of companies in each rating category from which Roth or an affiliate received compensation for investment banking services in the past 12 month.

Distribution of IB Services Firmwide

			IB Serv./Past 12 Mos. as of 02/27/23	
Rating	**Count**	**Percent**	**Count**	**Percent**
Buy [B]	**362**	**71.68**	**213**	**58.84**
Neutral [N]	**93**	**18.42**	**28**	**30.11**
Sell [S]	**4**	**0.79**	**1**	**25.00**
Under Review [UR]	**31**	**6.14**	**10**	**32.26**

Our rating system attempts to incorporate industry, company and/or overall market risk and volatility. Consequently, at any given point in time, our investment rating on a stock and its implied price movement may not correspond to the stated 12-month price target.

Ratings System Definitions - ROTH employs a rating system based on the following:

Buy: A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return of at least 10% over the next 12 months.

Neutral: A rating, which at the time it is instituted and or reiterated, that indicates an expectation of a total return between negative 10% and 10% over the next 12 months.

Sell: A rating, which at the time it is instituted and or reiterated, that indicates an expectation that the price will depreciate by more than 10% over the next 12 months.

Under Review [UR]: A rating, which at the time it is instituted and or reiterated, indicates the temporary removal of the prior rating, price target and estimates for the security. Prior rating, price target and estimates should no longer be relied upon for UR-rated securities.

Not Covered [NC]: ROTH does not publish research or have an opinion about this security.

ROTH Capital Partners, LLC expects to receive or intends to seek compensation for investment banking or other business relationships with the covered companies mentioned in this report in the next three months. The material, information and facts discussed in this report other than the information regarding ROTH Capital Partners, LLC and its affiliates, are from sources believed to be reliable, but are in no way guaranteed to be complete or accurate. This report should not be used