ROTH Capital Partners

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COMPANY NOTE | EQUITY RESEARCH | November 02, 2022

Healthcare: Biotechnology

Company Update
Estimates Changed

Oryzon Genomics SA | ORY.SM - €2.17 - MADRID | *Buy*

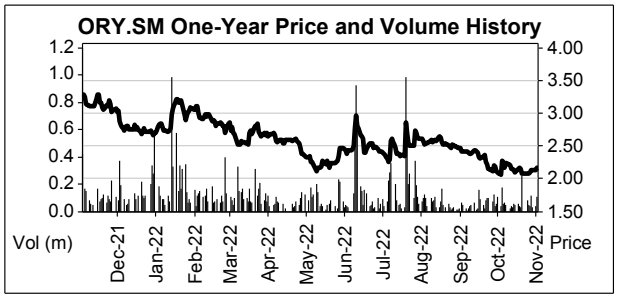
Stock Data	
52-Week Low - High	€1.98 - €3.40
Shares Out. (mil)	53.96
Mkt. Cap.(mil)	€117.10
3-Mo. Avg. Vol.	65,135
12-Mo.Price Target	€15.00
Cash (mil)	$27.1
Tot. Debt (mil)	$26.2

Revenue ($ millions)

Yr Dec	—2021—	—2022E—	—2023E—
		Curr	Curr
1Q	0.0A	0.0A	-
2Q	0.0A	0.0A	-
3Q	0.0A	0.0A	-
4Q	0.0A	0.0E	-
YEAR	0.0A	0.0E	0.0E

EPS $

Yr Dec	—2021—	—2022E—		—2023E—	
		Curr	Prev	Curr	Prev
1Q	(0.04)A	(0.03)A	(0.03)A	-	-
2Q	0.02A	0.01A	0.01A	-	-
3Q	(0.03)A	(0.01)A	(0.05)E	-	-
4Q	(0.04)A	(0.06)E	(0.05)E	-	-
YEAR	(0.10)A	(0.10)E	(0.14)E	(0.30)E	(0.34)E
P/E	NM	NM	NM	NM	NM



ORY 3Q22: Three Trials Running, Four to Start, Funded For About Two Years

ORY ended 3Q22 with pro forma cash of $27.1M, which should be enough for almost two years given the company's access to additional convertible debt financing that it has not yet drawn down. ORY is conducting three trials, and expects to initiate four more, starting this year with the expected initiation of its basket trial with iadademstat combination therapy in SCLC, followed by the start of the HOPE trial in Kabuki Syndrome likely in early 2023.

- **Iadademstat.** In July, ORY entered into a Cooperative Research and Development Agreement (CRADA) with the NCI, pursuant to which ORY and the NCI will collaborate to develop iadademstat further in clinical trials in solid and hematological malignancies. Iadademstat will now be developed in new indications and in combination with other agents such as investigational and marketed immuno-oncology and molecularly-targeted agents. The CRADA increases iadademstat's chances of clinical success in mid-stage clinical trials and its recognition by potential future commercial partners, in our view. In June, ORY presented updated results from its Phase 2 ALICE trial evaluating 60 or 90ug/m2/day iadademstat plus 75mg/m2 azacitadine combination therapy in elderly/unfit AML patients. The EHA poster is an update from the 4Q21 ASH poster that involves the same number of patients, and highlights include one additional CR, for an ORR of 81%, up from an ORR of 78% at ASH. Also, 12 of the 14 CR/CRi patients (86%; all 7 CRs and 5 of 7 CRi) became transfusion independent. ORY will present preliminary final data from ALICE next month at ASH. Regarding two iadademstat trials to come, ORY is preparing to start its Phase 1b FRIDA trial in rel/ref AML with FLT3 mutations, which will test iadademstat plus gilteritinib in up to 45 patients. FRIDA has primary endpoints of safety, tolerability, and determining the RP2D, and secondary endpoints of efficacy (i.e., CR/CRh, DoR, MRD), and ORY has a meeting scheduled with the FDA to best plan development of this combination therapy. ORY's Phase 1b/2 STELLAR trial in the U.S. in first-line SCLC is being designed and is a randomized, multi-center trial of iadademstat plus a checkpoint inhibitor in this setting that could potentially support accelerated approval. ORY is also preparing a collaborative Phase 1b/2 basket trial in the U.S. of iadademstat in combination with synergistic agents in platinum rel/ref SCLC and extrapulmonary high grade neuroendocrine tumors. This trial is expected to start in 4Q22 in the U.S.

- **Vafidemstat.** Active patient recruitment is ongoing in the randomized, 156-patient Phase 2b PORTICO trial in BPD patients at 15-20 centers in the U.S. and Europe. PORTICO's primary endpoints are reduction of aggression/agitation and overall BPD improvement. ORY presented initial blinded safety data from the first 43 PORTICO patients at the European Conference on Mental Health in September. In short, no serious or severe adverse reactions were reported, with 41 mostly mild adverse *(text continued on page 2)*

ORY Intraday Price: €2.16 at 2:44PM GMT+1

- *(text continued from page 1)* reactions reported in 12 patients (blinded, so unknown if vafidemstat or placebo), and with no reactions leading to treatment discontinuation or patient withdrawal. PORTICO has a pre-defined interim analysis in 1Q23 on the first 90 patients that have concluded at least 2/3 of the trial. The analysis exists to adjust the sample size in case of excessive variability around the endpoints or an unexpectedly high placebo rate. The Phase 2b EVOLUTION trial evaluating vafidemstat in schizophrenia continues to enroll patients and is looking to establish vafidemstat efficacy on negative symptoms and cognitive impairment in patients with schizophrenia. ORY is working with KOLs to finalize the design of HOPE, a randomized, double-blind, placebo-controlled, 50-60 patient Phase 1/2 personalized medicine trial with vafidemstat in Kabuki Syndrome (KS) patients. ORY is talking to regulatory agencies to refine the final design of HOPE, and should be filing an IND in 4Q22 in the U.S. and possibly filing to start enrolling in Europe as well. ORY's precision medicine programs in psychiatric disease are progressing, with collaborations in autism at the Seaver Autism Center for Research and Treatment at the Icahn School of Medicine at Mount Sinai Hospital and the Institute of Medical and Molecular Genetics (INGEMM) at Hospital Universitario La Paz, as well as in schizophrenia with Columbia University. Results from ongoing pilot studies to characterize patients with specific mutations to inform subsequent precision psychiatry trials with vafidemstat are expected to conclude by YE22.

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 $1.17 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)

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	2017A	2018A	2019A	2020A	1Q21	2Q21	3Q21	4Q21	2021A	1Q22A	2Q22A	3Q22A	4Q22E	2022E	2023E
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	4,278	2,928	3,982	3,930	15,118	4,228	4,166	4,274	4,573	17,241	21,551
G&A	4,502	2,993	3,176	3,484	1,302	1,200	1,070	1,957	5,529	1,343	1,520	659	1,384	4,906	6,378
Total operating expenses	**10,865**	**11,482**	**15,823**	**17,075**	**5,580**	**4,128**	**5,052**	**5,887**	**20,647**	**5,571**	**5,686**	**4,933**	**5,957**	**22,147**	**27,929**
Operating income	**(10,845)**	**(11,482)**	**(15,823)**	**(17,075)**	**(5,580)**	**(4,128)**	**(5,052)**	**(5,887)**	**(20,647)**	**(5,571)**	**(5,686)**	**(4,933)**	**(5,957)**	**(22,147)**	**(27,929)**
Other income (net)	5,659	8,143	11,522	11,805	3,536	2,256	3,252	3,466	12,510	3,826	3,894	4,248	3,000	14,968	6,000
Net income (pretax)	**(5,186)**	**(3,339)**	**(4,301)**	**(5,269)**	**(2,044)**	**(1,872)**	**(1,800)**	**(2,421)**	**(8,137)**	**(1,745)**	**(1,792)**	**(685)**	**(2,957)**	**(7,179)**	**(21,929)**
Net financial & tax	1,047	(1,991)	(187)	(1,098)	89	(2,823)	36	(62)	(2,760)	67	(2,139)	(67)	50	(2,089)	(2,298)
Net income	**(6,233)**	**(1,348)**	**(4,114)**	**(4,171)**	**(2,133)**	**951**	**(1,836)**	**(2,359)**	**(5,377)**	**(1,812)**	**347**	**(618)**	**(3,007)**	**(5,090)**	**(19,631)**
EPS basic	**(0.20)**	**(0.04)**	**(0.10)**	**(0.08)**	**(0.04)**	**0.02**	**(0.03)**	**(0.04)**	**(0.10)**	**(0.03)**	**0.01**	**(0.01)**	**(0.06)**	**(0.10)**	**(0.30)**
EPS diluted	**(0.20)**	**(0.04)**	**(0.10)**	**(0.08)**	**(0.04)**	**0.02**	**(0.03)**	**(0.04)**	**(0.10)**	**(0.03)**	**0.01**	**(0.01)**	**(0.06)**	**(0.10)**	**(0.30)**
Basic shares outstanding	31,711	34,638	41,589	49,235	52,762	52,762	52,762	52,762	52,762	52,762	52,762	53,609	53,662	53,199	64,395
Diluted shares outstanding	31,711	34,638	41,565	49,235	52,762	52,762	52,762	52,762	52,762	52,762	52,762	53,609	53,662	53,199	64,395

Source: SEC filings, company press releases, and ROTH Capital Partners

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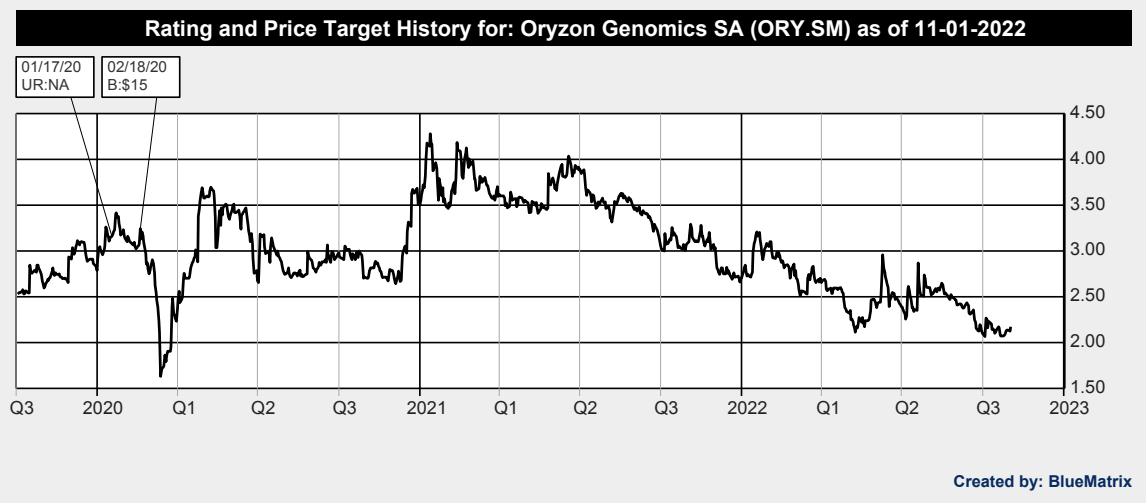
Disclosures:

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 11/02/22	
Rating	**Count**	**Percent**	**Count**	**Percent**
Buy [B]	**334**	**80.87**	**222**	**66.47**
Neutral [N]	**57**	**13.80**	**30**	**52.63**
Sell [S]	**5**	**1.21**	**2**	**40.00**
Under Review [UR]	**16**	**3.87**	**9**	**56.25**

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.

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