

TARGET PRICE : 8.4€ \ +202%

COMPANY UPDATE

VAFIDEMSTAT SHOWS PROMISE IN ASD AS WELL

ORYZON GENOMICS presented clinical update from ASD cohort of the Phase 2a REIMAGINE study of vafidemstat. The presented results showed that vafidemstat was able to significantly improve aggressive behavior in patients (n=6) with autism spectrum disorder (ASD). Moreover, the drug also showed a broader psychiatric effect in ASD patients. In our view, these results, along with the previously reported data from BPD and ADHD cohorts, bode well for vafidemstat's potential as treatment for psychiatric disorders. We reiterate our BUY rating and TP of €8.4.

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Vafidemstat shows promise in yet another REIMAGINE cohort

The company presented a clinical update from the Phase 2a study of vafidemstat (ORY-2001), company's dual LSD1/MAO-B inhibitor, at the 32nd European College of Neuropsychopharmacology (ECNP) Congress. Recall, REIMAGINE study is evaluating vafidemstat as a treatment for aggressive behavior across multiple psychiatric disorders, Attention Deficit Hyperactivity Disorder (ADHD), Borderline Personality Disorder (BPD) and Autism Spectrum Disorder (ASD)) and Alzheimer's disease, the latter under a parallel study (REIMAGINE-AD). The results, presented at ECNP Congress, showed that in the ASD cohort (n=6) vafidemstat was able to improve aggressive behavior, as measured by two different scoring systems (Exhibit 1).

ASD is a complex disorder that comprises a group of neurodevelopmental disabilities that affect communication abilities and behavior. Patients with ASD usually present with symptoms that interfere with everyday life, including difficulty in communication and interaction with other people, restricted interests and repetitive behaviors. Furthermore, patients with ASD can also present additional maladaptive behaviors such as aggression, self-injury and severe tantrum, causing greater stress to families and caregivers. While the most common treatment for ASD include different psychotherapy approaches, there are two pharmacological therapies that are approved to combat irritability in children with ASD, including Risperdal from JOHNSON & JOHNSON and Abilify from BRISTOL-MYERS SQUIBB. Albeit there are no well-defined treatment guidelines to manage aggression in these patients, especially in adults.

Update from ASD cohort bodes well for vafidemstat's clinical development

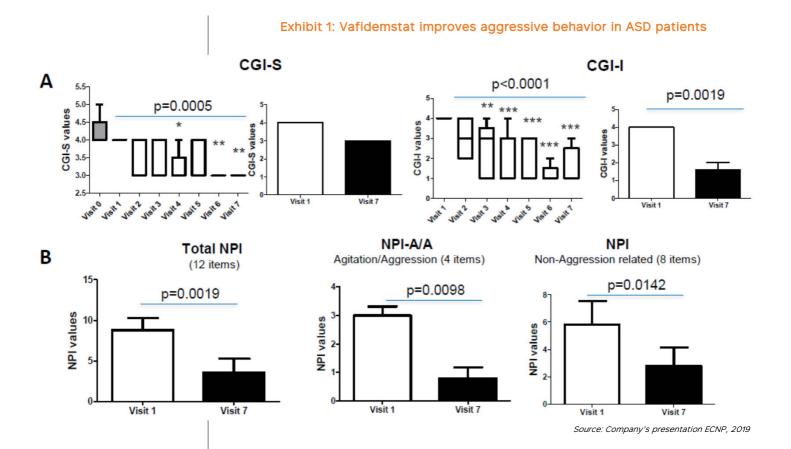
Results from the ASD cohort in REIMAGINE study showed that vafidemstat improved aggression-related items in ASD patients as evaluated by 2 different scoring systems: neuropsychiatric inventory (NPI) and Clinical Global Impressions (CGI) (Exhibit 1). CGI scoring provides a brief assessment of the patient's functioning by the physician on the scale from 1 to 7, respectively corresponding to: i) "no" to "severe" sickness for CGI-S; and ii) "very much improved' to "very much worse" for CGI-I. We note that after 8 weeks of treatment with vafidemstat, overall CGI-S scores for aggression improved from "moderately"/"severely" ill to "mildly" ill (value of 3) and CGI-I scores decreased to "much improved" condition (value of <2). As a point of reference, Risperdal achieved an improvement to value of 1-2 on CGI-I scale in 76% of children with ASD compared to 12% for placebo (n=101).

Adjusted EPS	-0.13	-0.29	-0.45
chg.	n.s.	n.s.	n.s.
estimates chg.	n.s.	n.s.	n.s.
au 31/12	2019e	2020e	2021e
PE	n.s.	n.s.	n.s.
EV/Sales	n.s.	n.s.	n.s.
EV/EBITDA	n.s.	n.s.	n.s.
EV/EBITA	n.s.	n.s.	n.s.
FCF yield*	n.s.	n.s.	n.s.
Div. yield (%)	n.s.	n.s.	n.s.

key points					
Share price (€)			2.8		
Number of Shares (m)					
Market cap. (€m)		127			
Free float (€m)		94			
ISIN		ES0167733015			
Ticker		ORY-ES			
DJ Sector		Health Technology			
	1m	3m	Ytd		
Absolute perf.	+1.6%	-19.8%	+28.4%		
Relative perf.	-3.9%	-22.9%	+9.4%		
Source : Fa	ctset, Inve	st Securities	estimates		

* After tax op. FCF before WCR

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Moreover NPI, which measures disease condition based on different behavioral domains, also showed a statistically significant improvement of the symptoms related to aggression-agitation (NPI-A/A). Notably, vafidemstat also improved overall NPI score, suggesting a broader psychiatric effect of the drug in this patient population (Exhibit 1).

Overall, while we acknowledge the limited number of patients and absence of placebo arm in the study, in our view, the presented results could serve as initial efficacy signal of the drug in this patient population. We also remind that in all REIMAGINE cohorts vafidemstat showed clean safety profile, with no hematologic impact. Considering the previously reported effects of vafidemstat in BPD and ADHD (see our note from May 6, 2019), we believe that the totality of the data bodes well for the future clinical development of the drug in psychiatric disorders. According to management, the company is currently in the dialogue with KOLs to finalize the future clinical development path for vafidemstat in psychiatric indications.



INVESTMENT CASE

ORYZON is a Spanish biotech specializing in the treatment of neurodegenerative diseases and cancer. In all its development programs, the company identifies biomarkers through its genetic and proteomic platforms in order to develop small molecule drugs. Looking ahead of multiple clinical updates, we believe that Oryzon's lead programs could significantly advance in 2019.

FINANCIAL DATA



Share information	2017	2018	2019e	2020e	2021e	2022e	2023e	2024
Published EPS (€)	-0.15	-0.03	-0.13	-0.29	-0.45	0.52	0.43	0.75
Adjusted EPS (€)	-0.15	-0.03	-0.13	-0.29	-0.45	0.52	0.43	0.75
Diff. I.S. vs Consensus	-0.3%	-14.1%	-20.2%	55		0.0_	51.15	• • • •
Dividend	0.0 70		20.270					
Valuation ratios	2017	2018	2019e	2020e	2021e	2022e	2023e	2024
P/E	n.s.	n.s.	n.s.	n.s.	n.s.	5.4x	6.5x	3.7x
EV/Sales	8265.92x	n.s.	n.s.	n.s.	n.s.	2.59x	4.45x	0.95
VE/EBITDA	n.s.	n.s.	n.s.	n.s.	n.s.	4.0x	6.0x	2.4x
VE/EBITA	n.s.	n.s.	n.s.	n.s.	n.s.	4.0x	6.0x	2.4x
Op. FCF bef. WCR yield	n.s.	n.s.	n.s.	n.s.	n.s.	12.6%	10.6%	29.0%
Op. FCF yield	n.s.	n.s.	n.s.	n.s.	n.s.	12.6%	10.6%	29.0%
Div. yield (%)	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
NB : valuation based on annu	ual average p	rice for past	exercise					
Entreprise Value (€m)	2017	2018	2019e	2020e	2021e	2022e	2023e	2024
Share price in €	4.6	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Market cap.	156	95	134	134	134	134	134	134
Net Debt	-17	-23	-30	-10	11	-5	-16	-42
Minorities	0	0	0	0	0	0	0	0
Provisions/ near-debt	0	0	0	Ö	0	0	0	0
+/- Adjustments	0	0	0	0	0	0	0	0
Entreprise Value (EV)	139	73	104	124	145	129	118	92
Income statement (€m)	2017	2018	2019e	2020e	2021e	2022e	2023e	2024
Sales	0.0	0.0	0.0	0.0	0.0	50.0	26.5	96.3
chg.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
EBITDA	-4	-3	-6	-12	-19	32	19	39
EBITA	-4	-3	-6	-12	-19	32	19	39
chg.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-39.2%	+98.9
EBIT	-4.7	-3.3	-6.2	-12.2	-19.3	31.7	19.1	38.3
Financial result	-1	-1	-1	-1	-1	-1	-1	-1
Corp. tax	0	3	1	0	0	-9	0	-5
Minorities+affiliates	0	0	0	0	0	0	0	0
Net attributable profit	-5.2	-1.2	-5.7	-12.7	-19.8	22.5	18.6	32.8
Adjusted net att. profit	-5.2	-1.2	-5.7	-12.7	-19.8	22.5	18.6	32.8
chg.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	-17.3%	+76.0
Cash flow statement (&m)) 2017	2018	2019e	20200	20246	20220	2023e	2024
<u>Cash flow statement (€m)</u> EBITDA	-3.9	-3.1	-6.0	2020e -12.0	2021e -19.0	2022e 32.0	19.5	38.7
	0.1	2.5	1.0		0.0	-8.7	0.0	
Theoretical Tax / EBITA				0.0				-5.1
Capex	0.6	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0	-7.0
Operating FCF bef. WCR	-3.2	<u>-7.6</u>	-12.0	-19.0	-26.0	16.3	12.5	26.7
Change in WCR	-0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Operating FCF	-3.4	-7.3	-12.0	-19.0	-26.0	16.3	12.5	26.7
Acquisitions/disposals	5.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Capital increase/decrease	16.9	11.9	20.0	0.0	6.0	0.0	0.0	0.0
Dividends paid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other adjustments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Published FreeCash Flow	18.5	4.7	8.0	-19.0	-20.0	16.3	12.5	26.7
Balance Sheet (€m)	2017	2018	2019e	2020e	2021e	2022e	2023e	2024
Assets	25	32	39	46	53	60	67	74
ntangible assets/GW	22	29	36	44	51	58	65	71
WCR	-8	-9	-9	-9	-9	-9	-9	-9
Group equity capital	34	45	59	47	33	55	74	107
	34	10		0	0	0	0	0
Minority shareholders	0	0	0	U	0			
,			0 0	0	0	0	0	0
Provisions	0	0						
Provisions Net financial debt	0 0	0 0	0	0 -10.0	0	0	0	-42.
Provisions Net financial debt Financial ratios	0 0 -17.2	0 0 -22.6	0 -29.8 2019e	0 -10.0	0 10.8 2021e	0 -4.7 2022e	0 -16.4 2023e	-42.: 2024
Provisions Net financial debt Financial ratios EBITDA margin	0 0 -17.2 2017 n.s.	0 0 -22.6 2018 n.s.	0 -29.8 2019e n.s.	0 -10.0 2020e n.s.	0 10.8 2021e n.s.	0 -4.7 2022e 64.0%	0 -16.4 2023e 73.5%	-42. 2024 40.29
Provisions Net financial debt Financial ratios EBITDA margin EBITA margin	0 0 -17.2 2017 n.s. n.s.	0 0 -22.6 2018 n.s. n.s.	0 -29.8 2019e n.s. n.s.	0 -10.0 2020e n.s. n.s.	0 10.8 2021e n.s. n.s.	0 -4.7 2022e 64.0% 64.0%	0 -16.4 2023e 73.5% 73.5%	2024 40.29
Provisions Net financial debt Financial ratios EBITDA margin EBITA margin Adjusted Net Profit/Sales	0 0 -17.2 2017 n.s. n.s. n.s.	0 0 -22.6 2018 n.s. n.s. n.s.	0 -29.8 2019e n.s. n.s. n.s.	0 -10.0 2020e n.s. n.s. n.s.	0 10.8 2021e n.s. n.s. n.s.	0 -4.7 2022e 64.0% 64.0% 45.0%	0 -16.4 2023e 73.5% 73.5% 70.4%	2024 40.29 40.29 34.09
Provisions Net financial debt Financial ratios EBITDA margin EBITA margin Adjusted Net Profit/Sales ROCE	0 0 -17.2 2017 n.s. n.s. n.s.	0 0 -22.6 2018 n.s. n.s. n.s. n.s.	0 -29.8 2019e n.s. n.s. n.s.	0 -10.0 2020e n.s. n.s. n.s.	0 10.8 2021e n.s. n.s. n.s.	0 -4.7 2022e 64.0% 64.0% 45.0% 62.8%	0 -16.4 2023e 73.5% 73.5% 70.4% 33.6%	2024 40.29 40.29 34.09 59.89
Provisions Net financial debt Financial ratios EBITDA margin EBITA margin Adjusted Net Profit/Sales ROCE ROE adjusted	0 0 -17.2 2017 n.s. n.s. n.s. n.s.	0 0 -22.6 2018 n.s. n.s. n.s. n.s.	0 -29.8 2019e n.s. n.s. n.s. n.s.	0 -10.0 2020e n.s. n.s. n.s. n.s.	0 10.8 2021e n.s. n.s. n.s. n.s.	0 -4.7 2022e 64.0% 64.0% 45.0% 62.8% 40.5%	0 -16.4 2023e 73.5% 73.5% 70.4% 33.6% 25.1%	2024 40.29 40.29 34.09 59.89 30.79
Minority shareholders Provisions Net financial debt Financial ratios EBITDA margin EBITA margin Adjusted Net Profit/Sales ROCE ROE adjusted Gearing ND/EBITDA (in x)	0 0 -17.2 2017 n.s. n.s. n.s.	0 0 -22.6 2018 n.s. n.s. n.s. n.s.	0 -29.8 2019e n.s. n.s. n.s.	0 -10.0 2020e n.s. n.s. n.s.	0 10.8 2021e n.s. n.s. n.s.	0 -4.7 2022e 64.0% 64.0% 45.0% 62.8%	0 -16.4 2023e 73.5% 73.5% 70.4% 33.6%	0 -42.3 40.29 40.29 34.09 59.89 30.79 n.s. -1.1x

SWOT ANALYSIS

BIOTECH

STRFNGTHS

OPPORTUNITIES

- Epigenetic platform
- ☐ Numerous clinical development programs

Expansion indications for clinical programs

Preclinical programs to move into clinic

Potential partnership agreement

Solid cash position

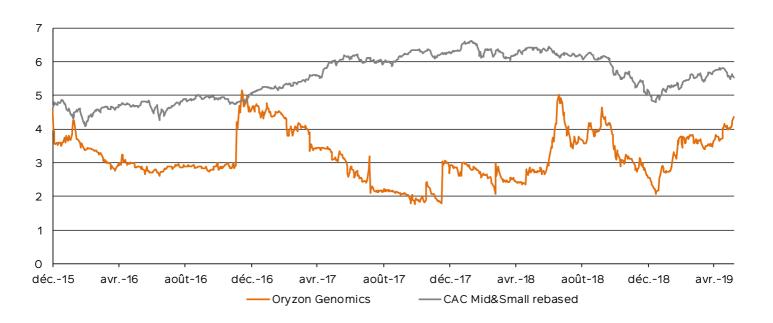
WEAKNESS

- No partnership
- Numerous failures in lead indication (AD)
- ☐ Tight competition in oncology indications

THREATS

- Clinical and regulatory risks
- Commercial risks
- Legal risks

SHARE PRICE CHANGE FOR 5 YEARS



DETECTION OF CONFLICTS OF INTEREST

	Corporate Finance	Treasury stocks holding	Prior communication to company	Analyst's personal interest	Liquidity contract	Listing Sponsor	Research Contract
Oryzon Genomics	No	No	Yes	No	No	No	Yes

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